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A STUDY TO DETERMINE THE BEST APPROACH FOR CONDUCTING  
A FORMAL AMBULATORY SURGERY PROGRAM AT  
WILLIAM BEAUMONT ARMY MEDICAL CENTER  
EL PASO, TEXAS

A Graduate Research Project  
Submitted to the Faculty of  
Baylor University  
In Partial Fulfillment of the  
Requirements for the Degree  
of  
Master of Health Administration

by

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## I. INTRODUCTION

### Historical Perspective

Major changes to improve quality of health care and to contain costs through more efficient use of available resources are taking place within the health care industry in the United States. The concept of ambulatory surgery has become widely accepted in the past decade, and has provided an effective means of containing costs. This concept is neither new nor revolutionary, but has been in existence since the turn of the century. The first published report of ambulatory surgery appeared in the British Medical Journal in 1909, when Dr. J.H. Nichol reported on 7,320 operations he had performed on ambulatory patients at the Royal Glasgow Hospital for Children.<sup>1</sup>

In spite of early successes in ambulatory surgery, the concept was slow to gain wide acceptance. By the late 1930's, as medicine advanced and specialization increased, the medical profession concentrated on performing surgical procedures in an acceptable hospital and discouraged surgery done outside the hospital environment. After World War II the specialty of anesthesiology experienced an explosive growth rate. Anesthesiologists, by the nature of their specialty, must work in the hospital environment; thus, the movement toward centralization of surgical services within the hospital was accelerated. The results of this movement was to create a public impression that first class surgical therapy could only be carried on in the confines of the hospital.<sup>2</sup>

As medical knowledge and technology expanded, the demand for health care service increased. With the proliferation of third party payment mechanisms, particularly the introduction of the MEDICARE and MEDICAID programs in the mid-1960's, both the demand and the cost of health care experienced tremendous annual increases. The majority of each health care dollar has been taken by hospital costs. As a result of this cost dilemma, health care managers began to search for more efficient alternatives, and the resurgence of ambulatory surgery became one of the inevitable products.

Probably the single most important factor which has led to the wide acceptance of ambulatory surgery in the health care industry is the tremendous improvement of anesthetics. The pharmaceutical industry has developed anesthetics that act rapidly and leave the patient with minimal prolonged side effects. In addition, the availability and use of short-acting narcotic and non-narcotic analgesics to treat pain, and drugs to manage nausea and vomiting, have reduced patient discomfort. In addition to pharmaceutical advancements, surgeons are now encouraging patients to become ambulatory sooner after surgery, which results in decreased recovery time.<sup>3</sup> This relatively new thinking has further encouraged the use of ambulatory surgery.

In 1980 the American Hospital Association (AHA) conducted a survey to determine the prevalence of ambulatory surgery in the United States. The survey was mailed to all non-federal hospitals in 134 of the largest metropolitan areas, which represented approximately 50 percent of all hospitals in the United States. Of the hospitals surveyed, 70 percent (1,506) stated that they offered ambulatory surgical services of some type.



Of these, 54 percent (803) stated they had organized ambulatory surgery programs. It was noted that there appears to be more of a tendency for a hospital to organize such a program as the number of hospital beds increase. The survey further showed that 18 percent of all surgery conducted in hospitals having ambulatory surgery facilities was done on an outpatient basis.<sup>4</sup> There is no consensus as to the percentage of all surgical procedures that could be conducted in this mode. Various authors have estimated that about 20 to 40 percent of all surgery performed in the United States today could safely be accomplished on an ambulatory surgical basis.

There is no question of the importance of ambulatory surgery in our current health care delivery system. In the past few years the American experience with this concept has increased dramatically. Based on current trends, it is widely predicted that the practice of ambulatory surgery will continue to increase in popularity.

#### Definitions Relevant to Ambulatory Surgery

Ambulatory surgery has been termed "same-day surgery," "outpatient surgery," "in-and-out surgery," and "short stay surgery." For the purposes of this research project the American Hospital Association's definition of ambulatory surgery will be used. It is:

Scheduled surgical procedures provided to patients who do not remain in the hospital overnight.<sup>5</sup>

Although surgery is often performed in a variety of places outside the main operating room (OR), such as the physician's office, various outpatient clinics, and in emergency departments, this study will not specifically address those procedures currently being done in such areas.

Only those procedures being done on an inpatient basis that could be performed on an outpatient basis in a program designed to provide scheduled surgical procedures to outpatients will be addressed.

### Questions Raised Regarding Ambulatory Surgery

The primary question raised when ambulatory surgery is first being considered by a hospital is whether the addition of this service will decrease the demand for hospital beds, or increase workloads because of existing backlogs and unmet demands for more complicated procedures. Stated another way, would Roemer's Law come into effect where an increase in supply would create an increase in demand for health care resources? Naturally the answer to this important question can only be determined by extensive forecasting studies and/or empirical measurement once such a project is implemented.

Major subjective variables which must be considered are the levels of acceptance of such a program by both physicians and patients. Closely associated with the acceptance question is number and types of surgical procedures that physicians will agree to perform in an ambulatory surgery setting. Numerous lists of surgical procedures which are performed in this setting have been published by various sources. One such list of common operative procedures in ambulatory surgery published by O'Donovan<sup>6</sup> shows approximately 280 different procedures.

Another question raised concerns the cost of implementing an ambulatory surgery program. Although many articles can be quoted which substantiate the direct cost savings to the patient and third party payors, the overall economic impact on a given hospital or a specific area would

require a careful study prior to implementation of ambulatory surgery. The primary issue in the civilian sector is the overall effect on the patient census when ambulatory surgery is practiced. In communities where existing facilities are already over-burdened with a demand for surgical services, such programs would most likely provide valuable relief at a lower cost. In communities where demand for surgical services is insufficient to fill available hospital beds, the addition of such facilities may exacerbate the hospital's financial problems.<sup>7</sup> Regardless of the setting, one fact remains: ambulatory surgery is less expensive for many patients.

In studying the effects of ambulatory surgery, it is important to separate the measure of successes between the financial and the medical aspects. A program may be medically successful if it can prove that it achieves all of its objectives, while at the same time it may be financially unsuccessful. The explicit objective of any health care program is the delivery of quality health care to patients; an implicit objective is to remain financially viable in order to continue rendering such care.<sup>8</sup>

The overall question of cost is a matter of perspective. In the civilian sector financial profitability is the dominant factor. While cost containment, or the efficient use of resources, is an important factor in the military sector, there is probably less incentive for military commanders of hospitals to reduce services or to substitute outpatient services for inpatient services in the name of cost efficiency. The idea of ambulatory surgery presents the perfect example of this lack of inducement. Using the existing workload measurement of the Medical Care Composite Unit (MCCU), which provides a major driving force for funding, a hospital admission provides approximately 30 times the workload credit of an

ambulatory visit. Consequently, the commander's major incentive is to insure that admissions remain high, and beds remain filled in order to justify next year's budget.

Another cost perspective related to the question of overall demand for ambulatory surgery is that of personnel staffing. In the civilian sector, staffing positions can generally be created or abolished rather quickly, dependent upon need. Within the military environment, however, staffing changes require a great deal more bureaucratic red tape. If the decision to implement ambulatory surgery requires the performance of a greater workload using only existing staff, i.e., the "take it from your hide" approach, then implementing ambulatory surgery in a military hospital may prove to be a very unpopular alternative, particularly for the nursing staff.

A final question relates to the quality of care. Supporters of ambulatory surgery have pointed out that a large number of procedures can be carried out under general anesthesia on a same day basis with no detriment to the patient. While cost issues are far from clearly resolved, there appears to be a greater consensus regarding quality in ambulatory surgery. Davis states that physicians should regard ambulatory surgery as not only being cost-effective medicine, but good medicine.<sup>9</sup> If we are to assume that this preliminary evidence is correct, and that it is possible to maintain or even improve the quality of surgical care by use of the ambulatory setting, then the primary issue that remains is how to implement appropriate mechanisms to insure that high quality is continuously maintained.

### Factors Prompting This Study

William Beaumont Army Medical Center (WBAMC) is a 463-bed hospital that serves an active duty, retired, and dependent population of approximately 140,000. Located adjacent to Fort Bliss, Texas, WBAMC has one of the largest patient care workloads of any Army medical treatment facility. In addition to the primary mission of patient care, WBAMC also conducts numerous graduate medical education programs, including a large medical internship program and residencies in Internal Medicine, Pediatrics, Obstetrics/Gynecology, Orthopaedics, Pathology, and General Surgery. Phase II of the Academy of Health Sciences U.S. Army Anesthesiology for Nurse Corps Officers and the Operating Room Nursing Course are also conducted.

Approximately 450 operative procedures are done monthly at WBAMC. Facilities exist to accommodate a very wide range of surgical procedures. There are eight operating rooms located in the main operating suite. Six to seven of these rooms are in use at any time during normal operating hours. Present surgical staffing is for seven operating rooms on weekdays until 1500, and two rooms at all other times.

The fact that ambulatory surgery has been widely acclaimed in the civilian health care industry, and yet not widely practiced in the Army in an organized fashion, opens the questions of not only why isn't this more popular, but how can such a service best be conducted by a military hospital? It is evident that a properly structured program could improve efficiency at WBAMC. Therefore, the purpose of this study is to determine the best approach for implementing an ambulatory surgery program. It should be noted that any model to be developed herein would be relevant

in many ways for other Army MEDDACs and MEDCENs, because of the great similarities that exist in mission and population served.

#### Limitations to the Study

The most severe limitation to this study is the lack of an established and uniform cost accounting system that is capable of isolating and identifying direct and indirect costs for selected surgical patients in Army facilities. While the Uniform Chart of Accounts (UCA) provides useful information for identifying overall costs, only generalized conclusions regarding cost effects from ambulatory surgery can be rendered. It is therefore not feasible to conduct a cost-benefits analysis that provides a totally accurate financial impact to be derived by implementing ambulatory surgery.

A second major limitation to this study is the inability to determine the actual staff manpower required for various types of surgical patients; therefore, manpower savings from ambulatory surgery cannot be accurately predicted. When the Uniform Chart of Accounts, Personnel (UCAPERS) becomes fully operational, such data may increase the level of sophistication possible for studying staffing impacts of ambulatory surgery.

A third limitation is the availability of nursing staff to operate additional nursing facilities. At present, the WBAMC Nursing Service, like most in other Army hospitals, faces an overall nursing staff shortage. To remove nurses from other services to staff ambulatory surgery areas is not likely; therefore, implementation of such a service will require requesting additional space allocations. This limitation was

imposed by the WBAMC Chief of Professional Services. One assumption of this study is that if implementation of ambulatory surgery actually results in a decreased inpatient census, some additional nursing staff could be shifted from other duties to assist in the program. Conceivably, the implementation of this concept could eventually allow for an overall nursing staff reduction. Considering existing staff shortages, the probable effect would be to allow the Nursing Department to fill other patient care areas experiencing critical shortages.

The final limitation is that no construction will be possible to separate a proposed ambulatory surgery program from existing surgical facilities. Because of this, any model proposed must use the main operating room and other existing treatment/diagnostic facilities.

#### FOOTNOTES

<sup>1</sup>M. Robert Knapp, "Ambulatory Surgery," Medical Group Management, Sep/Oct 1979, p. 51.

<sup>2</sup>Ibid, p. 51, passim.

<sup>3</sup>Linda A. Burns, Mindy S. Ferber, "Ambulatory Surgery in the United States: Development and Prospects," The Journal of Ambulatory Care Management, Vol 4, No. 3, Aug 1981, p. 2.

<sup>4</sup>Ibid.

<sup>5</sup>Lecture given by Mindy S. Ferber, American Hospital Association, Division of Ambulatory Care, to the AHA seminar titled, "Ambulatory Surgery: Implementing and Managing a Successful Hospital Program," Minneapolis, MN, 29 October 1981.

<sup>6</sup>Thomas R. O'Donovan, ed., Ambulatory Surgical Centers Development and Management, Germantown, MD: Aspen Systems Corporation, 1976, Appendix C, pp. 203-207.

<sup>7</sup>Michael J. Goran and Magruder C. Donaldson, "Role of the Federal Government in Ambulatory Surgery: Implications of Quality Assurance," Ambulatory Surgical Centers Development and Management, Thomas R. O'Donovan, ed., Germantown, MD: Aspen Systems Corp., 1976, p. 144.

<sup>8</sup>Allen Weltman, "Cost Determinations and Constraints in Ambulatory Surgery," Ambulatory Surgical Centers Development and Management, Thomas R. O'Donovan, ed., Germantown, MD: Aspen Systems Corp., 1976, p. 158.

<sup>9</sup>James E. Davis, "Developing the Ambulatory Surgical Unit: The Physician's Responsibility," The Journal of Ambulatory Care Management, Vol 4, No. 3, Aug 1981, p. 34.



## II. DISCUSSION

### Impact on Costs and Efficiency

As the subject of ambulatory surgery has become one of great interest in the health care field, various questions have been raised as to its economic effect. While direct cost savings can be demonstrated at the institutional level, the same is not clearly evident at the national level. Whether money will ultimately be saved by widespread incorporation of ambulatory surgery will be largely dependent upon such complicated variables as reimbursement policies of third party payers, availability and need of surgical services, pricing behavior of hospitals, capital costs, and changing styles of medical practice.<sup>1</sup> Variables that affect savings at the national level must be molded to stimulate sound planning and implementation of ambulatory surgery at community and institutional levels.

Demands for cost containment, efficiency, and high-quality services will not abate. To ignore these forces is to invite greater problems for the future. Ambulatory surgery is worthy of serious consideration because of the proven cost savings numerous hospitals have realized. Grossman maintains the crux of the entire cost savings issue is not whether ambulatory surgery should be performed, but where it should be performed.<sup>2</sup> If there is a community need for additional surgical capacity, separate facilities should be constructed for ambulatory surgery. Where excess surgical capacity is available, existing hospital facilities could be utilized for implementing this concept.

Unfortunately the military sector is far behind the civilian health care industry in implementing organized ambulatory surgery programs. As noted earlier, the lack of incentives is probably due to the workload accounting system, which provides little stimulus to treat patients on an outpatient basis. The idea of implementing any program that proposes to remove patients from hospital beds and decrease MCCU credits has naturally received little serious consideration from military managers. The most often expressed criticism regarding the MCCU formula is that a relatively simple accounting system is imposed upon a very complex medical delivery system, and levels of intensity in resource expenditures are not properly credited.

It has been proven that introduction of ambulatory surgery can actually increase total beds occupied in some areas. More important, total productivity of a hospital can be significantly increased with expenditure of only limited additional resources. Crouse-Irving Memorial Hospital of Syracuse, New York, increased total percentage of bed occupancy from 82 to 92 percent in four years following implementation of ambulatory surgery.<sup>3</sup> It can be concluded that hospitals experiencing nursing staff shortages resulting in surgical backlogs due to lack of beds, can greatly benefit from this concept. Ambulatory surgery can free needed hospital beds for patients requiring more complicated surgical procedures. The average length of stay (LOS) for patients actually occupying beds will increase under such circumstances.

Proponents of ambulatory surgery usually cite efficiency as its principal merit. Providing a specific amount of surgical services, defined as "appropriate" by surgeons, at the least possible overall cost, is of

vital importance to cost containment.<sup>4</sup> The specific responsibility of health care managers is to insure optimum productivity of resources under their control. Drucker points out that increase of productivity is, in part, achieved by innovation, or the shift from old and declining resources to those that are new and productive.<sup>5</sup> In this context it is clear that the inpatient treatment of certain categories of surgical patients for elective or minor procedures may represent obsolete, unproductive, and wasteful medical practice.

Military administrators must develop ambulatory surgery models to fit the needs of the military population. These programs must be formulated in a fashion that will efficiently generate the MCCU credits necessary to justify any losses that might be incurred elsewhere. Hospital commanders must be provided necessary incentives to shift resources and funding to accommodate such programs.

#### Quality Assurance in Ambulatory Surgery

Ambulatory surgery has been proven to be not only an efficient, but a safe form of medical practice. The Freestanding Ambulatory Surgical Association, which represents about 100 members, recently reported on results of surgical procedures performed in 36 freestanding facilities. This report showed that nearly a half million procedures had been performed with no fatalities. Patients transferred to hospitals numbered 233; 89 were unanticipated; and eight were emergency transfers.<sup>6</sup>

An extensive study by Natof found that of 13,433 patients treated at a freestanding center, only 106 medical, surgical, and anesthetic complications occurred. Of these, 16 patients required hospitalization.

There was no report of cardiovascular collapse or death. The study concluded that many surgical procedures can be performed safely in the outpatient setting.<sup>7</sup>

In February 1981, the Board of Regents of the American College of Surgeons issued a statement regarding ambulatory surgery. A portion of this statement follows:

. . . the American College of Surgeons approves the practice of performing certain operative procedures in ambulatory surgical facilities, provided that appropriate quality assurance measures are in force. Of prime concern is the patient's suitability for ambulatory surgery as well as the provision of proper standards for physician privileges and facility accreditation.<sup>8</sup>

The WBAMC Quality Assurance Program (QAP) provides necessary mechanisms to monitor quality of care provided in the proposed program. Quality of care provided will be equal to that provided inpatients. Expected patient outcomes proposed as program standards are:

1. Surgical procedures shall be performed safely and accurately by qualified personnel.
2. Procedures will be coordinated in such a way as to provide for accuracy of scheduling and efficiency of time for the patient, staff, and physician.
3. The physician will insure that the patient adequately understands the procedure to be performed, and suffers no undue anxiety from lack of knowledge.
4. The patient must understand his/her responsibilities of self-care both before and after the procedure.
5. The patient, or a responsible party, must know exactly what untoward signs or symptoms to watch for after discharge, and what action to take should complications develop.
6. Qualified personnel shall be available at all times to answer the patient's questions.
7. The patient must understand what prescribed drugs are for, when to take them, and what precautions to observe when taking these drugs.

8. The patient must be assured of safety in traveling home following discharge.
9. The privacy of the patient must be provided for and respected.
10. The patient's valuables and personal effects must be maintained in a secure area until discharge.
11. The patient will be treated as a unique individual with the respect and dignity which is recognized as a fundamental right of every patient entering WBAMC.<sup>9</sup>

### Models for Ambulatory Surgery

The primary tasks of health care managers involved in the planning and development of ambulatory surgery programs is to gain a good understanding of the basic concepts, then conduct a functional analysis of how such a program can best be performed in a particular setting. Much useful information can be gained from reviewing various ambulatory surgery models that have been implemented.

Two basic models of ambulatory surgery exist: those that utilize existing hospital main operating room (OR) and recovery facilities (hereafter termed the "integrated model"); and those where surgery is performed in separate facilities specifically created for such a purpose, either on or off the hospital campus, (hereafter termed the "freestanding model").<sup>10</sup> Although ambulatory surgery can take place in many settings, the most common is the hospital.<sup>11</sup>

Several different forms of the integrated model have evolved. Some hospitals have developed rather formal programs which utilize a separate nursing unit for the reception, processing, recovery, and discharge of the patient. Other hospitals have totally integrated these patients with

other surgical patients. In this less formal setting, patients are discharged directly from the recovery area when they have recovered sufficiently from the anesthesia. Although such patients are treated on an outpatient basis, some hospitals may do a "paperwork admission."

The most obvious advantage of the integrated model is that ambulatory surgery capability can be established without making large capital expenditures for new construction. This means that services can be more quickly established. Many economies are realized when inpatient facilities can be utilized for outpatient procedures. When surgery is performed in the hospital, surgeons can do more complex procedures because extensive diagnostic and treatment resources are readily available for use. For example, if the pathology report on a breast biopsy shows cancer, more definitive surgery could be performed at that time rather than waiting until the patient could be transferred to the inpatient area of the hospital.<sup>12</sup>

Berkoff notes that the potential for sharing of medical ancillary support services in a hospital setting is a mixed blessing. Such sharing arrangements usually create complex circulation patterns and complicate the organization of an efficient ambulatory surgery unit.<sup>13</sup>

The introduction of ambulatory surgery cases into already busy main ORs makes scheduling more difficult. Those responsible for scheduling may consider these procedures of lower priority since they are minor or elective. Ambulatory cases must be scheduled during morning hours to allow sufficient time for the recovery and discharge of patients that same day. This can produce conflict since surgeons consider morning hours as prime time for performing their surgical procedures.

Bumping, or rescheduling of surgery cases, can be a major obstacle in development of an effective integrated model. Bumping is a problem at WBAMC due to procedures taking longer than scheduled, or because of emergency procedures taking precedence over scheduled cases.<sup>14</sup> Insuring that ambulatory cases are sequentially scheduled in a particular OR would certainly increase overall productivity of the OR suite and should reduce bumping of these cases.

The turn-around times of rooms between cases in the main OR area are necessarily longer than in a freestanding model since more complex cases are mixed with ambulatory cases. Minor cases usually involve less surgical equipment; therefore, turn-around times in freestanding models are ordinarily as short as ten to fifteen minutes. Although no studies have been done at WBAMC, time between cases is thought to be much longer. A planning turn-around time of 30 minutes would be fairly accurate. The fact that WBAMC conducts extensive training programs in the ORs would also be a prominent factor. Students normally require longer times to perform cleaning and set up tasks than experienced staff members.<sup>15</sup> Integrated models are generally less efficient than freestanding facilities since they are not tailored specifically to minor or elective procedures; therefore, fewer cases can be expected to be completed during a given time.

Another problem of the integrated model involves perceptions of the surgical and recovery staffs toward ambulatory patients. These staff members are routinely involved in complex surgery cases and may consider minor cases less interesting and perhaps not worthy of the same attention. Ambulatory surgery patients, particularly those receiving a general anesthetic, require rather intense care, even if only for a short time. Every

effort must be made to insure that the special needs of these patients are understood by staff members.

The integrated model may not lend itself to an overall increase in total number of surgical cases performed in the main ORs if a full surgical workload already exists. The size of the assigned OR and recovery nursing staffs and the physical space available in recovery areas for bed expansion, are primary limiting factors which could preclude an increase in the number of surgical cases. Establishment of an integrated model will reduce existing surgical backlogs only if added effort is made to improve scheduling procedures and reduce turn-around times between cases.

The freestanding model represents a much larger investment of resources for ambulatory surgery. A much more efficient service can be provided when separate facilities are designed for this concept. The freestanding model tends to alleviate those disadvantages noted in the integrated model. Because this model is tailor-made, the many complexities in integration of ambulatory cases with other surgical cases are eliminated. Scheduling complications are greatly reduced and more cases can be completed per day in each freestanding OR since most minor procedures, with the possible exception of some plastic surgery cases, are of short duration with shorter turn-around times. Probably the greatest advantage of the freestanding model is the creation of a larger surgical capability. A greater number of surgical procedures can be accomplished without imposing a corresponding burden on the main OR and recovery staffs. Where there is an unmet demand for more complicated surgical procedures, additional main OR time and nursing beds are made available for such purposes. Because the nursing and administrative staff necessary to operate the freestanding



facility is small and appropriately proportioned for the specific mission, greater capacity is realized with a relatively small staff increase.

The greatest disadvantage of the freestanding model is the rather large capital investment required to design and build a new facility. A thorough marketing analysis is required to insure sufficient justification for this type venture. Kraft maintains that at least 2000 cases per year must be projected before this model should be considered.<sup>16</sup> A related disadvantage is the longer time required to implement ambulatory surgery when the freestanding model is selected. In the military sector, where construction projects face a long and involved bureaucratic process for approval, implementation of ambulatory surgery from a freestanding facility could take many years. Under such circumstances the only feasible alternatives for many military hospitals may be incorporating the integrated model or reallocation of existing space to house a freestanding service.

#### Selection of Patients

Generally speaking, ambulatory surgery is concerned with minor procedures which do not constitute a hazard to the patient.<sup>17</sup> Appendix A provides a list of ambulatory surgery procedures performed by various surgical specialties.<sup>18</sup> Typical cases are nonemergent, noninfected, and elective. While the rate will vary greatly among hospitals, a large proportion of these cases performed in existing programs are done under general anesthesia. Such procedures are usually of short duration, often less than one hour, and require less than a two-hour stay in the recovery room.<sup>19</sup>

Lieberman, et al., maintains that ambulatory surgery is based on two well-tested premises:

1. A large variety of minor surgical procedures, either emergency or elective, do not require overnight post-surgical care and observation.
2. It is rarely necessary for such a patient to remain overnight in the hospital solely for post-anesthesia care and observation.<sup>20</sup>

The following American Society of Anesthesiologists patient classification system provides a useful guide in selecting patients for ambulatory surgery:

Class I. A normal healthy patient for an elective operation.

Class II. A patient with a mild systemic disease.

Class III. A patient with a severe systemic disease that limits activity but is not incapacitating.

Class IV. A patient with an incapacitating systemic disease that is a constant threat to life.<sup>21</sup>

As a general guideline, the majority of Class I and Class II patients can be considered candidates for ambulatory surgery. The Surgi-center at Walter Reed Army Medical Center accepts both classes of patients into their program.<sup>22</sup>

Patients who are to undergo this type of surgery must make arrangements to be transported home and to have a responsible adult remain with them for a period of approximately 24 hours. Single, active duty soldiers residing alone or in the barracks are not good candidates for the program, nor are patients who must commute long distances to the hospital.

Other Class I and Class II patients who should not be considered for ambulatory surgery are:

1. Patients who are below the average range of intelligence or senile. Retarded children or adults under the close supervision of their families can be an exception.
2. Patients with severe character disorders, especially alcoholics and other drug abusers.
3. Uncooperative, hostile, or litigious patients.<sup>23</sup>

### Planning the Feasibility Study

In development of the feasibility study as it relates to ambulatory surgery at WBAMC, the first step is to establish strategic goals for such a program. Some goals considered by civilian hospitals are:

1. Maintain current market share.
2. Develop new markets.
3. Maintain/generate revenue.
4. Increase inpatient treatment efficiency.
5. Attract/maintain physicians.<sup>24</sup>

The primary goal recommended for WBAMC's proposed program is to improve efficiency by removing certain classes of surgical patients from inpatient rolls. This must be done without significantly degrading the funding level of the medical center. A second goal is insuring that high quality assurance standards are continually maintained. The heuristic approach will be used in formulating the proposed model since a similar program does not exist, and because of multiple variables which must be considered.

The three basic components of a feasibility study are (1) market and (2) internal assessment, both of which are used for forecasting utilization levels; and (3) financial projections.<sup>25</sup> Market assessment will not be addressed for this study as WBAMC's catchment area is well-defined and no market competition exists.

Internal assessment can best be accomplished through use of a questionnaire designed to solicit information regarding types of procedures presently being performed that may lend themselves to surgery in the out-patient mode. It is also useful to gain some insight as to probable level of physician acceptance that can be anticipated.

Based on input from staff physicians, demand forecasts can be developed by retrieval of WBAMC workload data from the Army's Individual Patient Data System (IPDS) (RCS MED-345). The Uniform Chart of Accounts (UCA) can be used to develop generalized financial projections.

#### Development of the Demand Forecast

Determination of probable types and numbers of surgical procedures that would be performed in the proposed program was accomplished by a study of past workload data for selected procedures. Key staff physicians were provided a list of surgical procedures and a short questionnaire (Appendix B). The questionnaire was purposely kept very brief to increase the probability of physician response. Questionnaires were forwarded to the following individuals with 100 percent response:

- Chief, Department of Surgery (information only)
- Chief, Department of Obstetrics/Gynecology
- Chief, Department of Orthopaedics
- Chief, Ear, Nose, and Throat Service
- Chief, General Surgery Service
- Chief, Neurosurgery Service
- Chief, Ophthalmology Service
- Chief, Peripheral Vascular Surgery Service
- Chief, Plastic Surgery Service
- Chief, Urology Service
- Chief, Oral Surgery Service

Following a review by the Chief, Department of Surgery, the list of procedures recommended by the respondents was coded in the International

Classification of Disease, 9th Revision, (ICD-9) format by the Medical Records Administration Section of WBAMC Patient Administration Division. The coded procedures were then forwarded to the Special Studies Support Branch of the Patient Administration Systems and Biostatistics Agency (PASBA), Fort Sam Houston, with a request for retrieval of WBAMC workload data (Appendix C).

Requested workload data were returned by PASBA (Appendix D). Report 1, Selected Sole Surgical Procedures, WBAMC, shows the number of patients and corresponding bed days for CY 1980 and 1981, for the 85 procedures studied. It should be noted that data provided shows only those procedures done alone and not in conjunction with another coded procedure. This was specified to insure that data would be captured only on patients whose procedures would be eligible for ambulatory surgery. The presence of other, more complicated procedures, done in conjunction with coded procedures studied would provide invalid data for demand forecasts.

Total number of patients and corresponding bed days for each of the coded procedures is itemized by service at Table 1. Due to the non-availability of data for December 1981, totals for the first eleven months of CY 81 were multiplied by a factor of 1.083 to provide expected totals for CY 81. This was based on the assumption that workload is relatively constant for each month. A study of monthly data shows no significant decrease for December 1980.

TABLE 1  
WBAMC WORKLOAD OF SELECTED SOLE PROCEDURES

SERVICE	CY 1980		JAN-NOV 1981		ADJUSTED CY 81	
	NO.	BED DAYS	NO.	BED DAYS	NO.	BED DAYS
Plastic Surgery	231	1300	207	1336	224	1447
ENT	83	270	72	258	78	280
Orthopaedics	180	847	117	753	127	816
Ophthalmology	146	571	120	435	130	471
OB/GYN	391	658	323	578	350	626
General Surgery	290	1446	233	1112	252	1205
Urology	22	100	16	74	17	80
Oral Surgery	55	273	50	401	54	434
TOTALS	1398	5465	1136	4947	1232	5359

In developing a demand forecast for ambulatory surgery, Kraft recommends that hospitals review all surgical procedures resulting in a length of stay of one to three days.<sup>26</sup> This information was requested from PASBA, and was provided in Reports 2b and 3b, which give workload data by frequency of occurrences (number of patients) for CY 1980 and 1981, respectively.

A study of data for both CYs in Report 1 shows that the vast majority of those coded procedures listed resulted in average LOS greater than three days. In CY 1980 for example, approximately 24 percent of those procedures showed an average LOS of three days or less, 40 percent showed four days or less, and 60 percent showed six days or less. It is not possible to pinpoint exact reasons for these longer LOS's for what are considered relatively minor procedures. The fact that WBAMC is a teaching facility is undoubtedly a large factor for the higher accumulation of bed days. The teaching environment simply requires a more structured approach to the practice of medicine, which in turn requires more time per patient. It is

postulated that in military hospitals with a teaching mission, workload studies for procedures resulting in a LOS of five days or less may render better information from which to develop a demand forecast.

In an effort to determine if the selected sole procedures listed in Report 1 constitute the majority of those most suitable for consideration for ambulatory surgery, a comparison was made of total number of patients undergoing those procedures with totals of all patients listed in Reports 2b and 3b. In CY 1980 the selected sole procedures studied accounted for 50.7 percent of all surgical patients with a LOS of three days or less. For CY 1981, 45.2 percent of the patients were attributed to these procedures.

All procedures listed on Report 3b were cross-referenced to Report 1 for CY 1981, to insure that no group of coded procedures that show high frequency was inadvertently eliminated from the study. Procedures with a frequency of 20 or more on Report 3b were noted. It was observed that a relatively large number of endoscopy procedures, many of which are done on an outpatient surgery basis at many civilian hospitals, were not considered. Most significant of these were laparoscopies (Code 1694), which show a frequency of 57. Other procedures that had high frequencies were Special Radiologic Procedures, Computerized Tomography (CT) Scans, and Diagnostic Nuclear Medicine Studies, all of which would probably not be candidates for the proposed program. From this it is concluded that a majority of the more frequent procedures were identified. Although many of the less frequent procedures would also be eligible for this program, they were not studied further.

One error was noted in the coding of procedures submitted to PASBA. The Chief, Peripheral Vascular Surgery, recommended that angiographies be considered for ambulatory surgery. Only arteriographies of the thorax (Code 3329) were entered; therefore the returned data did not reflect other angiography procedures that should also be considered. Based on all angiographies listed on Reports 2b and 3b (Codes 3309 through 3349) a total of 68 occurrences were noted in CY 1980 and 99 for CY 1981. These figures will be used in the utilization forecast.

A review of the questionnaire responses revealed that an organized ambulatory surgery program would be considered very beneficial for WBAMC. Of the ten physicians questioned, nine felt that such a program would be beneficial, one was undecided. Eight physicians stated that their services would be frequent users, one was undecided, and one felt that the service would only be used occasionally due to type of surgery (neurosurgery) conducted. Six of the respondents stated they had experience with organized ambulatory surgery programs, and four stated they did not.

Various positive aspects of ambulatory surgery listed by responding physicians are as follows: (1) would provide for better bed utilization and conservation of resources; (2) would be a convenience to patients, patients would prefer returning home to familiar surroundings soon after surgery; (3) sense of well-being when convalescing at home; (4) parallels the state of the art in the private (civilian) sector; (5) would enhance the surgical training program.

Negative aspects cited by physicians included: (1) not applicable to certain active duty patients (i.e., single patients, or those living in a barracks); (2) there is a need to develop a better method of accountability to provide proper workload credit for such a program; (3) such a



program would require a change in scheduling and attitudes, i.e., smaller, shorter cases must be scheduled first to allow sufficient recovery time that same day.

Overall, the questionnaires revealed an overwhelmingly positive response favoring establishment of an organized program. The conclusion drawn is that the program would be frequently utilized by a majority of the surgical services for patients qualified to be entered into the program.

Following a detailed review of workload data on selected sole procedure studies and of overall predisposition of the surgical staff toward the program, a forecast of expected level of utilization was developed. These estimates are based on the assumption that only those procedures studied and listed in Report 1 would initially be included in the program. It is probable that as successes are noted, other procedures of less frequency would be included.

Consultation with the Chief, WBAMC Anesthesia Service and Operating Room, indicated that approximately 80 percent of all patients undergoing minor elective surgery are ASA Class I or II patients.<sup>27</sup> Considering the fact that not all Class I or II patients are eligible for the outpatient mode of surgery, it is further assumed that 70 percent of all patients undergoing the selected sole procedures studied would be eligible for this program.

Using the total number of patients listed on Table 1 and adding angiography patients not previously counted, 1,466 patients in CY 1980 and 1,331 in CY 1981 had one of the sole procedures listed. Using the 70 percent factor, 1,026 patients in CY 1980 and 932 in CY 1981 would have been considered eligible for ambulatory surgery. Based on these figures, it is

concluded that approximately 1,000 patients per year would initially be treated in the proposed program.

### Patient Flow Through the Proposed System

The successful implementation of an integrated ambulatory surgery program is contingent upon establishment of a smooth and efficient patient flow through the system. Such a program will require the cooperation of a number of departments much the same as exists for treating inpatients. The major difference is that this program proposes to accomplish in a few hours those procedures presently being done in two or three inpatient days. Since the primary goal is efficiency, every effort must be made to eliminate system bottlenecks and insure expeditious flow patterns.

It is recommended that a separate ambulatory surgery nursing unit (ASNU) be established to provide coordination for the program, as well as required nursing and administrative support. Discussion of the proposed location and staffing will be presented later. With the exception of the ASNU, use of existing staff and facilities is recommended. Further, existing standing operating procedures will be used wherever possible to minimize confusion and inconvenience for both patients and staff.

Patients will be required to be seen on three separate days: (1) day of referral, (2) day of pre-anesthesia interview, and (3) day of surgery. Appendix E, The Proposed Ambulatory Surgery Procedural Guide, provides a detailed listing of individual tasks and responsibilities on each of these days. The following discussion is a general description of events for each day:

Day of Referral.--Figure 1 depicts proposed patient flow on the day of referral.

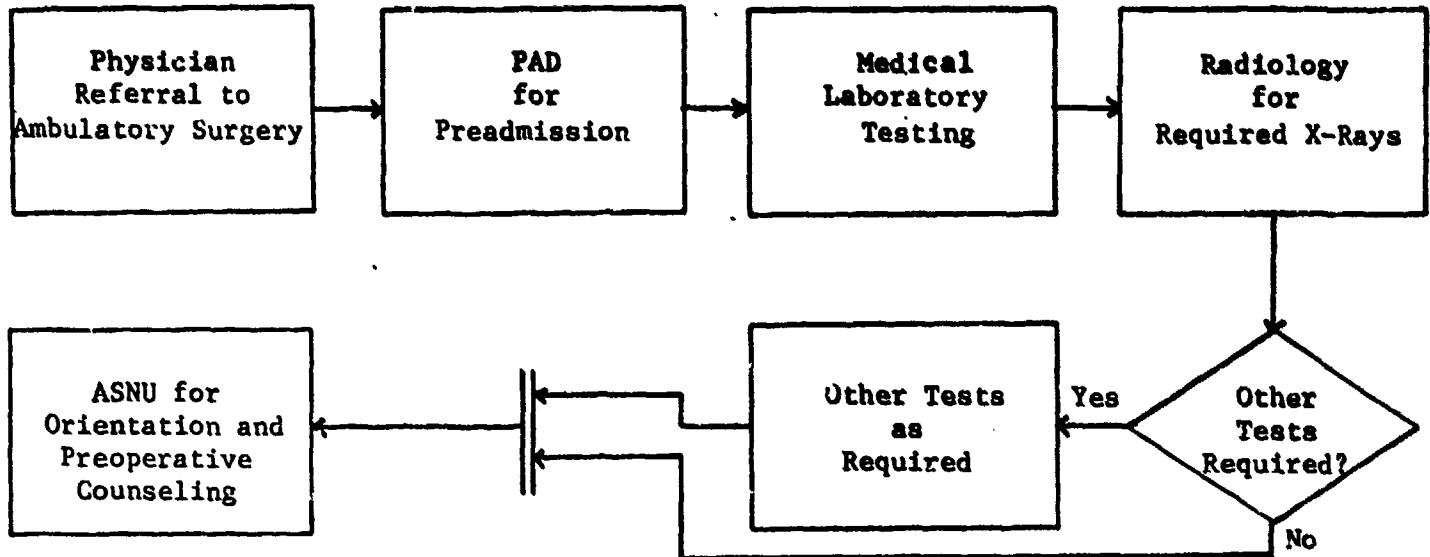


Figure 1. Day of Referral Activities

Patients will enter the program when the physician determines that the surgical procedure required can be done on an outpatient basis. It is important that a brief description of this concept be provided to the patient along with assurances that ambulatory surgery constitutes safe, state of the art medical practice. The patient should also receive a brief appraisal of additional responsibilities incurred by this mode of treatment. The advantages and conveniences of the system should also be addressed as deemed appropriate. A pre-admission physical examination should be conducted on the initial visit, and all required forms and medical-legal protocols should be completed at this time. Adequate instructions should be given regarding applicable day of referral activities.

A pre-admissions packet will be completed in the Admissions Office of the Patient Administration Division (PAD). Although these patients are actually treated on an "outpatient" basis, since they do not

remain overnight, they will actually occupy a hospital bed for a very brief period. Pre-operative laboratory, x-ray, or other diagnostic tests should also be done on this day, but could be postponed to another day if necessary. Sufficient time must be allowed for the processing, recording, and transmittal of results to the ASNU prior to the day of the pre-anesthesia interview.

The ASNU is the final area to be visited on this day. An orientation to the ASNU should be conducted, followed by a short but complete pre-operative teaching session designed to more adequately educate the patient regarding the program and his/her self-care responsibilities. It is recommended that a brochure be developed which provides information on those key teaching points discussed. Some information to be provided includes the following:

- a. The patient must adhere to the rule that no food or fluids can be taken after midnight prior to the day of surgery.
- b. If the patient feels confused or has unanswered questions, he/she should contact either the physician or the ASNU.
- c. The patient must notify the physician of any change in physical condition prior to surgery, such as a cold or fever. Even minor ailments may require special consideration.
- d. The patient should check with the physician before taking any medications prior to surgery. Medications prescribed by other physicians should be made known to the surgeon.
- e. Patients should leave all jewelry and valuables at home. A military identification card and medical card will be needed.
- f. Patients must arrange beforehand to have a responsible adult to drive them home following surgery. Patients must be cautioned against driving or important decision-making in the first 24 hours following surgery.<sup>28</sup>

The use of videotapes as teaching instruments has proven very effective in a number of existing programs. The patient will be given an appointment for a pre-anesthesia interview prior to departing the ASNU.

2. Day of Pre-anesthesia Interview.--The interview with the anesthesiologist or nurse anesthetist cannot take place until all pre-operative test results have been compiled. Thus, a separate hospital visit must be established to complete this important requirement. For patients who are to receive other than general anesthetics, necessary counseling and protocols can normally be conducted on the day of referral, but could be postponed until the day of surgery.

At the appointed time the patient will report to the ASNU where any pertinent pre-operative instructions are reiterated, to include the arrival hour on the day of surgery. The patient will be given necessary forms for the interview and asked to proceed to the Anesthesia Office. An anesthesiologist or nurse anesthetist will review the record, conduct the appropriate physical examination, and counsel the patient regarding the procedure.

3. Day of Surgery.--Figure 2 depicts patient flow through the system on this day.

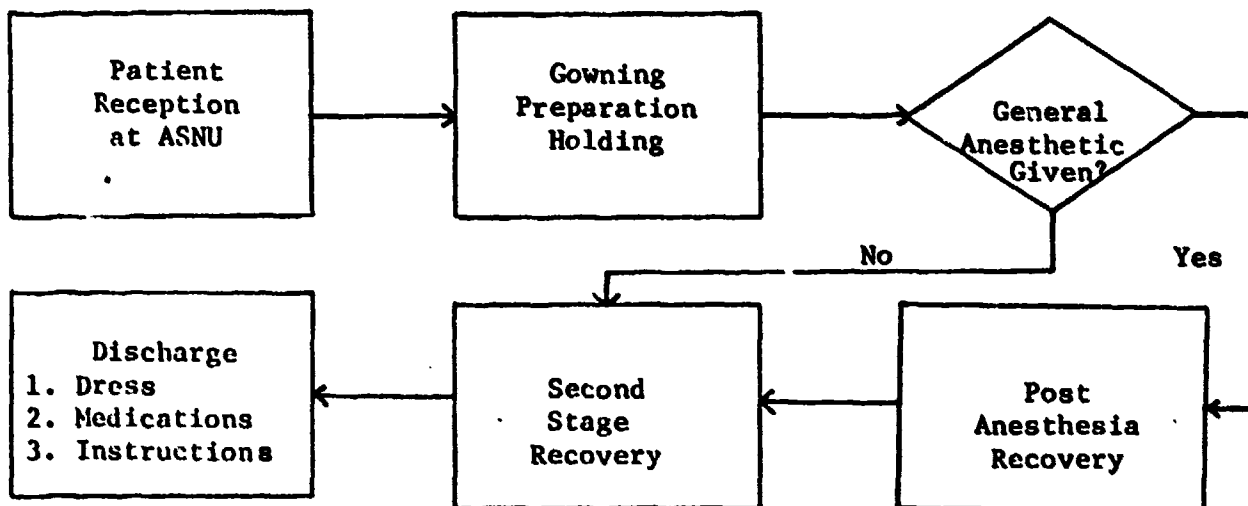


Figure 2. Day of Surgery Activities

Upon arrival, the ASNU Head Nurse, or designee, will affix the identification bracelet to the patient's wrist. The Ward Clerk will notify the Admissions Office of the admission. Following inprocessing, the patient will be escorted to the designated hospital room for gowning, where he will remain until transfer to the OR. Surgical preparation and transfer are the responsibilities of the OR staff.

If a general or regional anesthetic was administered, the patient will be transported to the Post Anesthesia Recovery Area (PAR), where he will remain until necessary recovery criteria are met with regards to activity, consciousness, color, ventilation, and circulation. General anesthetic patients will normally remain in the PAR a minimum of one hour.<sup>29</sup>

Upon return to the ASNU by recovery room personnel, the patient is returned to his designated bed for further recovery and observation. At the appropriate times the staff will encourage ambulating and taking of clear liquids. As appropriate, post-operative teaching should be conducted. Patients should be told what to do should complications develop following discharge. A brochure containing appropriate phone numbers should be provided.

The patient's family plays a very important supportive role both before and after surgery, and should be included in teaching, as appropriate. Since ambulatory surgery is an especially effective program for certain pediatric surgical cases, the nursing staff must anticipate the special needs and concerns of the parents and provide indicated teaching or counseling.

Prior to discharge, the attending physician must conduct a physical examination and complete the discharge note. In the event complications

develop at any time on this day, the physician will make necessary arrangements to have the patient transferred to one of the surgical wards.

Once dressed and cleared for discharge, the patient will be escorted in a wheelchair to the appropriate discharge area by an ASNU staff member. Accrued hospital charges may be paid at the Treasurer's Office prior to departure, or a bill can be mailed to the home address. Additional coordination may be required if medications are to be picked up at the Outpatient Pharmacy.

It is highly recommended that on the day following surgery an ASNU staff member, preferably the Head Nurse, call the patient to insure that recovery is progressing normally. This followup has proven very beneficial in many civilian ambulatory surgery programs. A patient satisfaction survey should also be developed for use as a monitor for the program. Every effort should be made to insure that effective, action-oriented patient relations remain in effect. The program can succeed only if the delivery of caring, high quality patient care is perceived.

#### Establishment of an Ambulatory Surgery Nursing Unit

WBANC has a serious shortage of floor space to facilitate the expanding mission of many departments. This is mainly due to the vast increases in medical technology which were not existent when the architectural plans of the hospital were developed in the 1960s. The overcrowded conditions existing in most areas of the hospital make it difficult to identify a suitable area to accommodate an ASNU that could realistically be made available.

Some clinics have small operating rooms and other areas that could be modified to house a freestanding ambulatory surgery area, but proposing the use of one of these is not considered feasible due to existing missions and workload. Further, until ambulatory surgery has proven itself to be effective, it is probable it will suffer a rather low priority for both space allocation and staffing.

Faced with these limited alternatives, a search was made of the nursing wards in the main hospital to identify a suitable area. A study was made of average monthly patient census on each ward to locate an area with low patient density. Ward 10 East, the Acute Respiratory Disease (ARD) and ambulatory patient care ward, was found to have the lowest density by a very large margin. This ward, with 22 operating beds and an expansion capability of over 60 beds, had an average occupancy of only 6.9 beds per day from April 1981 to December 1981, the only recent months for which figures were readily available. During this time the average monthly range was 3.7 to 10.5 occupied beds per day. Inspection of the ward revealed that adequate space is available to use for an ASNU; therefore, this area is recommended. Figure 3 is a floor plan of Ward 10 East.

To isolate the ASNU from other Ward 10E functions to the greatest extent possible, it is recommended that it be located in one of the eastern corners of the ward. Initially two four-bed rooms and two two-bed rooms are recommended and could be expanded as demand increases. This should provide sufficient space and allow for a varied mix of patients at any given time. Rooms T-15 through T-18, or rooms T-19 through T-22 are specifically recommended. One of the two doctors' offices, T-68 or T-69



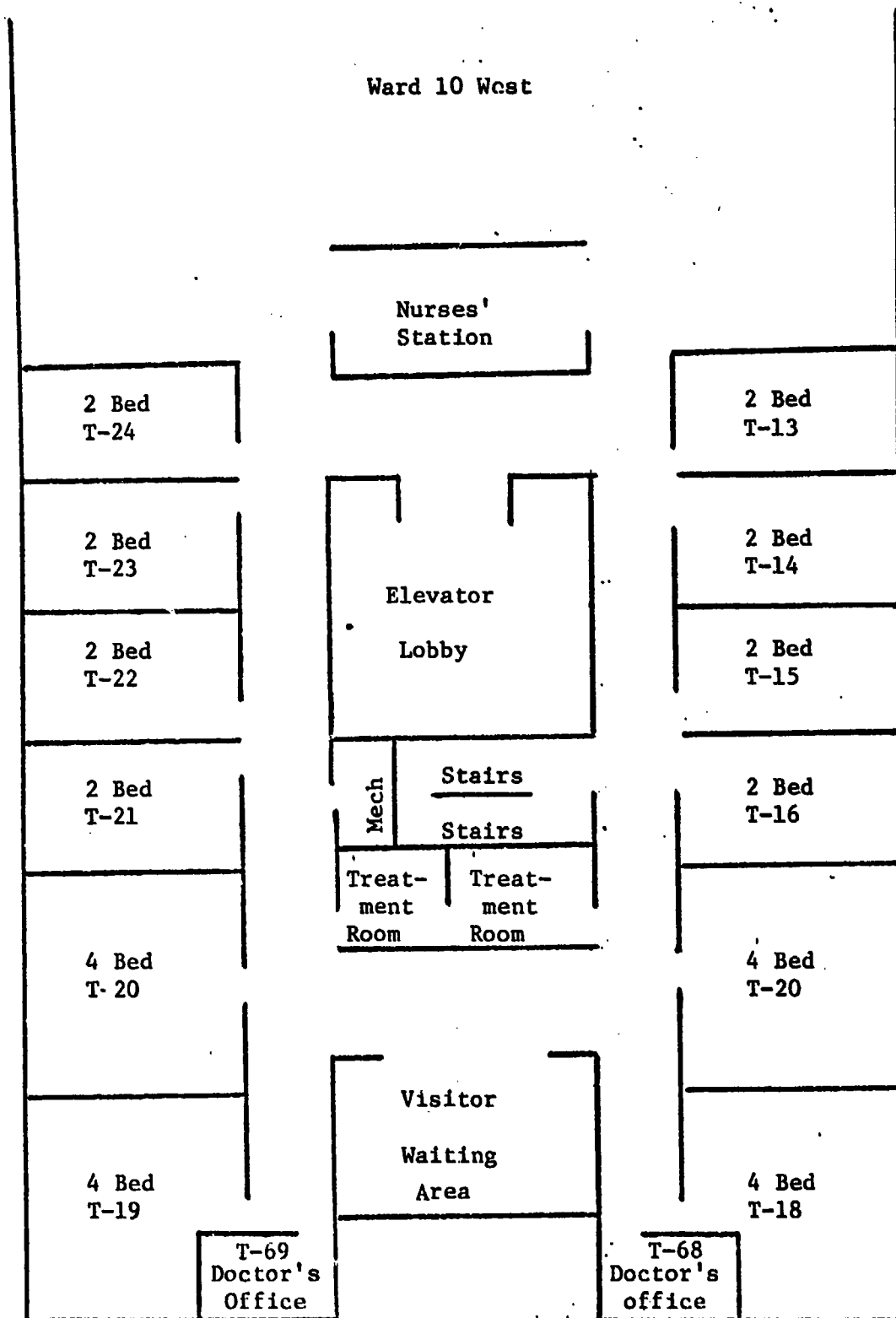


Figure 3. Ward 10 East Floor Plan

should also be made available for ASNU staff use. One advantage of locating in one of these areas is the close proximity of a large dayroom which can be used for a family waiting area.

Since the ward is not designed for the unique flow of ambulatory patients some compromises may be required. In assigning rooms, the ASNU Head Nurse must consider not only age and sex of the patient, but also scheduled time of surgery. It is not advisable to mix pre-operative and post-operative patients in the same area, although it may not be possible to completely separate these patients. Patients suffering any minor post-operative problems or complications should be provided a private room when available.

In the event ASNU beds are required for use in an ARD crisis or other urgent situation, the ambulatory surgery mission could be temporarily terminated and the staff could be utilized for other duties as needed.

#### Staffing the Ambulatory Surgery Nursing Unit

Ambulatory surgery represents a different mode of accomplishing an existing mission and does not require a new mission statement for implementation.<sup>30</sup> Staffing requirements to be presented are based only on workload projections forecast in this study. As the program evolves and new procedures are incorporated by the medical staff, total productivity will increase significantly. Because of the large number of less frequent procedures not studied which could be included, it is very possible that over 2000 patients per year may eventually be treated in this program. Consequently, staffing levels above those to be recommended here may later be required in the ASNU.

Local appraisal is the yardstick code which must be used since no known prototype of the proposed ASNU exists in a military setting. The work unit to be used for productivity management is the occupied bed day (OBD). The unit will remain operational from 0700 to 1630 on weekdays with surgery scheduled between 0800 and 1200.

The projected staff requirement of one registered nurse professional, two nurse assistants, and one ward clerk is recommended. The proposed Schedule X is at Appendix F. These requirements were made without reference to any possible personnel consolidations that may occur with the existing Ward 10E staff. This was done to present a clearer description of actual ASNU manpower requirements. Further, it seems appropriate to keep the ambulatory surgery mission separate from existing missions to the greatest extent possible because of its unique operational aspects.

The ASNU Head Nurse must be a registered professional nurse in order to adequately perform the wide range of nursing and supervisory requirements necessary in caring for patients with specialized and intense needs. Pre-operative nursing functions are concerned with assessment, planning, instruction, and physical and mental preparation. Postoperative nursing involves physical care, encouragement, postoperative teaching, and evaluation.<sup>31</sup>

In order to provide better continuity in the ASNU, the two nurse para-professionals should be civilian positions. Because of the teaching and psychological aspects of ambulatory surgery nursing care, special consideration must be given to selecting only those individuals with good communicative and other interpersonal skills for the three nursing positions.

The ASNU Ward Clerk plays an important role in the program. This individual is responsible for maintaining separate files for each patient. This requires gathering medical information from several different areas. The Ward Clerk must also coordinate scheduling with the referring clinics and perform duties as receptionist and clerical assistant.

#### Financial and Workload Projections

As noted in the Introduction, one of the greatest limitations of this study is the inability to precisely define the actual costs that could be saved in removing selected patients from hospital beds by implementing ambulatory surgery. Within the military's present accounting system, expenses are attributed to the various cost centers without regard to the amount of resources expended on any specific category of patients. To further complicate this dilemma, the relatively fixed costs such as Military Pay and Allowances (MPA) and Base Operation (BASOPS) expenses, which will not change with ambulatory surgery, are proportioned to each cost center through a form of step-down accounting used in the Uniform Chart of Accounts (UCA).

While the UCA does not lend itself well to precise cost isolation, the fact that various costs are itemized and credited to the different cost centers allows for development of some rather general financial projections. Since the UCA figures to be presented combine expenses of all categories of surgical patients, actual numbers should be used only to determine potentials for ambulatory surgery.

The UCA calculates cost per OBD for each service by summation of MPA, BASOPS, and Operation and Maintenance, Army (OMA) expenses credited

to a given service, divided by total accrued OBDs for that service. Using the assumption that 70 percent of patients receiving one of the selected sole procedures in CY 1981 would have been eligible for ambulatory surgery, Table 2 provides total expense that would have been attributed to these patients.

TABLE 2  
COSTS PER OBD BY SERVICE

Service	Adjusted CY 81 OBDs	FY 81 Cost X Per OBD =	Total X	70%
Plastic Surgery	1447	\$163.91	\$237,178	\$166,024
ENT	280	242.85	67,998	47,599
Orthopaedics	916	170.73	139,316	97,521
Ophthalmology	471	197.55	93,046	65,132
OB/GYN	623	259.59	162,503	113,752
General Surgery	1205	220.26	265,413	185,789
Urology	10	187.28	14,982	10,488
Oral Surgery	40	171.18	74,292	52,005
Peripheral Vascular Surgery	396	269.71	106,805	74,764
TOTALS	5255		\$1,161,533	\$813,074

Within the \$813,074 figure calculated, it is necessary to identify those variable costs which are subject to change with ambulatory surgery. Specifically, nursing ward costs should be studied since clinic, OR, and Recovery Room costs will remain fairly level. The following variable cost activities were selected for study: supply costs, which include both medical and non-medical supplies (up to \$200); linen costs; pharmacy costs; Department of Pathology (medical laboratory) costs; and ration costs.

Since the Departments of Obstetrics/Gynecology, Surgery, and Orthopaedics will be the only participants in ambulatory surgery, an examination of the above cost variables was conducted for nursing wards

caring for patients of the three departments. Intensive care areas were excluded from the study. FY 1981 UCA cost figures were used. Supply costs were reported in dollars, but linen, pharmacy, and pathology costs were reported in number of procedures, or weighted procedures. Dollar cost was calculated by determining the hospital-wide cost of one procedure multiplied by number of procedures attributed to different cost centers studied. The cost of rations was studied separately using the average cost per ration served for the FY. Table 3 provides results of this study. Note that surgery includes all services previously listed, other than Obstetrics/ Gynecology and Orthopaedics.

TABLE 3  
VARIABLE COST ISOLATION BY DEPARTMENT

Dept	Supply Cost	Ration Cost (OBDx3.84)	Linen Cost (#ProcX.85)	Pharmacy Cost (#WtProcX9.64)	Pathology Cost (#WtProcX.81)	Total OBD	Cost/ OBD
OB/GYN	95617	55081	118190	577571	79146	14344	64.52
Surgery	189925	136965	184740	2565310	214233	35668	92.27
Ortho	65979	71274	103949	479416	50223	18561	41.53

Using figures from Table 3, and the demand forecast presented earlier, Table 4 shows total selected variable costs that would have been attributed to 70 percent of those patients receiving one of the selected sole procedures in CY 1981.

TABLE 4  
VARIABLE COSTS FOR SELECTED SURGICAL PATIENTS

Department	Cost/OBD	Selected Procedure OBDs	Total Cost
Obstetrics/Gynecology	64.52	438	28260
Surgery	92.27	3019	278563
Orthopaedics	41.53	571	23714
			\$330,537

Comparing the results of Table 2 and Table 4, it can be concluded that approximately 40 percent of total costs for those considered to be eligible for ambulatory surgery can be attributed to the variable costs studied. In the worst case estimate it is postulated that at least one-third of the \$330,537 should be saved with ambulatory surgery.

Actual costs of conducting the proposed program must also be considered in the financial analysis. Since no construction or equipment costs are required, the only additional costs will be manpower and limited amounts of supplies and linens. Manpower costs based on one captain with six years in service and three GS-04, Step 5, civilians is approximately \$64,000. Additional variable expenses of \$15,000 for the ASNU would raise the annual cost to \$79,000. The impact of lost revenue from payment of patient per diem rates was not calculated due to varying rates among beneficiaries, but is considered low. Total cost of conducting the proposed program should be approximately \$110,000.

In formulating conclusions regarding the overall impact of ambulatory surgery on WBAMC, it is helpful to determine the probable impact on reported workload. To do this, total MCCUs that were actually generated by the selected sole procedure patients were compared with that which would have been reported using ambulatory surgery. In this study, each patient enrolled in the proposed program was considered to have generated 11 MCCUs (1 admission plus 1 OBD). The exact "with" ambulatory surgery formula is as follows:

$$\text{Number of patients} \times 10 + (.7)(\text{Number of patients}) \times 1 + (.3)(\text{actual OBDs}) \times 1 = \text{MCCUs with ambulatory surgery.}$$

Table 5 provides the results of this study.

TABLE 5  
COMPARISON OF MCCUs FOR CY 1981 DATA

Service	Number	OBDS	MCCUs Without	MCCUs With
			Ambulatory Surgery	Ambulatory Surgery
Plastic Surgery	224	1477	3687	2839
ENT	78	280	1060	919
Orthopaedics	127	816	2086	1604
OB/GYN	350	626	4126	3933
General Surgery	252	1205	3725	3058
Urology	17	80	250	206
Oral Surgery	54	434	974	708
Peripheral Vascular	99	396	1386	1178
TOTALS			19065	15969

The loss of 3096 MCCUs would have been insignificant since this accounted for less than .5 percent of the total MCCUs reported for the year. This finding should alleviate the concerns of those who might oppose such a program on the grounds of lost workload credits.

Because the above financial and workload projections offer only general conclusions regarding the impact of ambulatory surgery at WBAMC, empirical studies are required to determine the exact benefits and cost savings. It can be stated, however, that implementation of the proposed program presents no apparent financial or workload risk, since in the worst case estimate the program would probably operate close to the break even point.



## FOOTNOTES

<sup>1</sup>Randolph M. Grossman, "Is Ambulatory Surgery Less Expensive?" Hospitals, May 16, 1979, p. 112, 116.

<sup>2</sup>Ibid.

<sup>3</sup>Marilyn Baader, Vice President of Crouse-Irving Memorial Hospital in a presentation to the American Hospital Association Seminar titled: "Ambulatory Surgery: Implementing and Managing a Successful Hospital Program," Minneapolis, MN, October 29, 1981.

<sup>4</sup>Grossman, p. 112.

<sup>5</sup>Peter F. Drucker, Managing in Turbulent Times, Harper and Row Publishers, New York, 1980, p. 14.

<sup>6</sup>George L. Hoffman, "Quality Control in Ambulatory Surgery," Bulletin of the American College of Surgeons, Vol 66, No. 1, November 1981, p. 6.

<sup>7</sup>Herbert E. Natof, "Complications Associated with Ambulatory Surgery," Journal of the American Medical Association, Vol 244, No. 10, September 5, 1980, pp. 1116-1118.

<sup>8</sup>"ACS Reports," Bulletin of the American College of Surgeons, Vol 66, No. 1, November, 1981.

<sup>9</sup>These standards were developed in part from the following source: Sharon M. Buske, "A Quality Assurance Program You Can Use," Successful Management of Ambulatory Surgery Programs, American Health Consultants, Atlanta, Georgia, 1981, pp. 309-363.

<sup>10</sup>Linda A. Burns and Mindy S. Ferber, "Ambulatory Surgery in the United States: Development and Prospects," The Journal of Ambulatory Care Management, Vol 4, No. 3, August 1981, p.2.

<sup>11</sup>Thomas P. O'Donovan, "The Pros and Cons of Ambulatory Surgery," Ambulatory Surgical Centers, Development and Management, Thomas R. O'Donovan ed., Germantown, MD: Aspen Systems Corp., 1976, p.12.

<sup>12</sup>Ibid.

<sup>13</sup>Marlene J. Berkoff, "Planning and Designing Ambulatory Surgery Facilities for Hospitals," The Journal of Ambulatory Care Management, Vol 4, No. 3, August, 1981, p.46.

<sup>14</sup>Interview with Colonel James W. Herman, Chief of the Operating Room Nurse Section, William Beaumont Army Medical Center, January 22, 1982.

<sup>15</sup>Ibid.

<sup>16</sup>Presentation given by Richard O. Kraft, Clinical Professor of Surgery, University of Michigan Medical Center, to the AHA Ambulatory Surgery Seminar, October 29, 1981.

<sup>17</sup>Samuel L. Lieberman, et al, "Hospital-Based Outpatient Surgery," New York State Journal of Medicine, Vol 75, No. 3, p.437.

<sup>18</sup>This list was compiled by the Day Surgery Unit of Glenn Falls Hospital, Glen Falls, New York.

<sup>19</sup>Thomas R. O'Donovan, p. xiv.

<sup>20</sup>Lieberman, et al, p. 438.

<sup>21</sup>M. Dennis Barton, "Outpatient Surgery and Anesthesia," Primary Care, Vol 4, No. 1, March 1977, p. 184.

<sup>22</sup>Telephone conversation with CPT Mark Lenneville, Ambulatory Surgery Unit Administrator, Walter Reed Army Medical Center, Washington, D.C., March 8, 1982.

<sup>23</sup>M. Dennis Barton, pp. 184-185.

<sup>24</sup>R.K Dieter Haussman, Principal, Health and Medical Division, Booz, Allen and Hamilton, in a presentation to the AHA Ambulatory Surgery Seminar, October 30, 1981.

<sup>25</sup>Ibid.

<sup>26</sup>Richard O. Kraft, AHA Ambulatory Surgery Seminar, October 29, 1981.

<sup>27</sup>Interview with MAJ Aron Elteto, Chief of Anesthesiology and Operating Room, William Beaumont Army Medical Center, El Paso, Texas, March 18, 1982.

<sup>28</sup>Patient responsibilities were developed from the following source: Douglas D. Hawthorne, "Management Forum: Patient Responsibilities," Same Day Surgery, May, 1979, pp. 56-57.

<sup>29</sup>Interview with LTC Ralph Earnest, Chief, Intensive Care Nursing Section, William Beaumont Army Medical Center, El Paso, Texas, January 27, 1982.

<sup>30</sup>LTC R. Alba, Chief, of Manpower/Survey Staffing Guides Branch, Force Development Division, Health Services Command, in a presentation given to the HSC Ambulatory Patient Care Conference, Fort Sam Houston, Texas, March 31, 1982.

<sup>31</sup> Susan Ann Cox, "Perioperative Nursing in the Ambulatory Setting," Point of View, Vol 18, No. 4, 1981 (Published by Ethicon, Inc.)

### III. CONCLUSIONS AND RECOMMENDATIONS

#### Conclusions

Ambulatory surgery has been proven to be safe and efficient medical practice, and has greatly proliferated in the civilian health care industry in recent years. This study has shown this to be a viable concept for WBAMC. Such a program could be implemented with very little financial risk. Further, it has been shown that ambulatory surgery will result in no significant loss in productivity in terms of MCCU credits.

The major strengths of ambulatory surgery do not rest so much with the number of positions that could be decreased since no manpower reductions are forecast. Rather, the major incentive for implementation at WBAMC is the tremendous potential it presents to alleviate the multiple problems created by nurse staffing shortages. As beds are freed by ambulatory surgery, existing nursing staff will become available to care for other patients.

While the proposed ambulatory surgery model does not by itself create additional surgical capacity, it does free beds that could be filled if a greater surgical capacity is developed through scheduling and operational improvements in the main OR. With the surgical backlogs that exist in different areas, higher surgical productivity, coupled with ambulatory surgery could increase the total reported workload by a significant amount.

Ambulatory surgery is a concept whose time has come for WBAMC. The response from the questionnaires to the various service chiefs indicates that such a program would receive wide acceptance and support from the medical staff. Due to the presence of a wide range of surgical specialties and large overall workload, WBAMC would be an outstanding site to test this innovative form of medical practice in a military setting. The implementation of the Army's first integrated ambulatory surgery program at WBAMC would further provide a fine example for other military hospitals in the development of similar programs.

#### Recommendations

It is recommended that the WBAMC Commanding General approve implementation of the proposed program. The CPS should appoint an ambulatory surgery executive committee, tasked with the responsibility of developing necessary SOPs; delineating specific staff responsibilities; preparing an approved list of procedures which are to be done on an outpatient basis when the patient's condition permits; educating the staff regarding the program; and monitoring both utilization and quality of the program.

Recommended committee members are:

1. Chief, Department of Surgery, Chairman
2. Chief, Department of Orthopaedics
3. Chief, Department of Obstetrics/Gynecology
4. Chief, Anesthesia Service
5. Head Nurse, ASNU
6. Administrator, CPS
7. Senior representatives from the following departments:

Patient Administration Division  
Department of Radiology  
Department of Pathology

An effective ambulatory surgery program requires extensive coordination among a number of different departments. Responsible department heads must devote special emphasis towards insuring that sound management principles, particularly those of planning and control, are properly implemented. The recommended committee should meet frequently during the early stages of program development and implementation. As preliminary system problems are resolved, the committee may elect to meet less frequently. The on-going responsibility of this committee will then be one of providing direction to the program, resolving problems, and monitoring the overall quality of patient care provided. This committee should report directly to the WBAMC Medical Care Evaluation/Quality Assurance/Utilization Review/Risk Management Committee on matters relating to quality assurance. Further, each participating department should incorporate ambulatory surgery into their existing Quality Assurance Programs.

In order to realize the full potential of ambulatory surgery, it is recommended that WBAMC conduct further studies designed to develop better scheduling and control procedures of the main OR facilities. Some specific areas recommended for study are the establishment of centralized scheduling, automation of OR scheduling, increased control of time allocated for procedures, and the development of policies for ambulatory surgery scheduling.

It is recommended that the Commanding General include ambulatory surgery in WBAMC's strategic planning process. As the program proves itself successful, additional resources should be considered to allow for needed expansion. When conditions permit, the implementation of a free-standing facility should be seriously considered from either existing or newly constructed floor space.

**APPENDIX A**

**List of Procedures**

## DAY SURGERY PROCEDURES

### ENT

Antrostomy  
Antral Window  
Arch Bars, Application, Removal  
Biopsy Neck Mass  
Caldwell Luc  
Cautery, Epitaxis  
Closed Reduction, Nose, Zygoma  
Ear, Microscopic Examination  
Ear, Removal Foreign Body  
Eardrum Cyst, Removal  
Esophageal Dilatation  
Inclusion Cyst, Excision  
Laryngoscopy  
Laryngoscopy (With Operative Procedure)  
Mouth Lesions, Biopsy, Excisions  
Myringoplasty  
Myringotomy (with or without Tubes)  
Nasal Foreign Bodies, Removal  
Nasal Fracture, Closed Reduction  
Nasal Fracture, Open Reduction  
Nasal Polypectomy  
Nasopharynx (Exam under Anesthesia)  
Otoscopy  
Otoscopy (With Excisions, Foreign Body Removal)  
Palate, Biopsy  
Palate Repair (minor)  
PE Tubes, Insertion, Removal  
Removal Choanal Polyps  
Rhinoplasty  
Septal Reconstruction/Septoplasty SMR  
Submaxillary Calculus, Removal  
Thyroglossal Duct Cyst, Excision  
Tongue, Biopsy, Excision Lesions  
Wedge Resection Lip  
Wiring of Fractured Jaw

### ENDOSCOPY

Bronchoscopy  
Bronchoscopy (With Operative Procedure)  
Colonoscopy  
Colonoscopy (With Operative Procedure)  
Esophagoscopy  
Esophagoscopy (With Operative Procedure)  
Esophagogastroduodenoscopy  
Esophagogastroduodenoscopy (With Operative Procedure)  
Laparoscopy  
Laparoscopy (With Operative Procedure)  
Laryngoscopy  
Laryngoscopy (With Operative Procedure)  
Procto-Sigmoidoscopy  
Procto-Sigmoidoscopy (With Operative Procedure)  
Cystoscopy  
Cystoscopy (With Operative Procedure)  
Arthroscopy  
Arthroscopy (With Operative Procedure)



## EYE

Cataract, Excision  
Chalazion, Excision  
Conjunctival Lesions, Excision  
Cryopexy, Eye  
Discission  
Ectropian or Entropion Repair  
Excision Lid Lesions  
Eye Exam under Anesthesia  
Eye Muscle Surgery (Bilateral)  
Eye Muscle Surgery (Unilateral)  
Iridectomy  
Lacrimal Duct Probing  
Pterygium, Excision  
Repair of Lacerations  
Removal Foreign Bodies, Eye  
Suture, Removal

## GENERAL SURGERY

Abcess, I & D  
Anal Tag, Excision  
Basal Cell Lesions, Excision  
Brachial Cleft Cyst, Excision  
Breast Biopsy (Bilateral)  
Breast Biopsy (Unilateral)  
Breast Implant Insertion and Removal (Bilateral)  
Breast Implant Insertion and Removal (Unilateral)  
Cervical Nodes, Excision  
Debridement of wounds  
Epigastric Hernia Repair  
Fistulectomy  
Foreign Body Removal without X-Ray  
Foreign Body Removal with X-Ray  
Frenulectomy-Tongue  
Ganglion, Excision  
Gynecomastia, Male Mastectomy (Bilateral)  
Gynecomastia, Male Mastectomy (Unilateral)  
Hemangioma, Excision  
Hemorrhoidectomy  
Hydrocelectomy  
Inguinal Herniorrhaphy (Infant Bilateral)  
Inguinal Herniorrhaphy (Infant Unilateral)  
Inguinal Herniorrhaphy (Adult Bilateral)  
Inguinal Herniorrhaphy (Adult Unilateral)  
Inguinal Exploration  
Inguinal Nodes, Excision  
Ingrown Toenails, Excision  
Keratosis, Excision, Curettage  
Lacerations, Repair, Revision of  
Lipoma, Excision  
Lysis of Adhesions  
Masses, Excision of small to medium size and area  
Melanoma, Excision  
Muscle Biopsy  
Orchiopexy  
Pilonidal Cyst, Excision  
Pedicle Graft, 2nd, 3rd Stage Repairs  
Plantar Warts, Excision, Fulguration, Laser Excision

Rectal Biopsy  
Rectal Polypectomy  
Rectal Dilatation  
Removal Lesion with Skin Graft  
Scalene Node Biopsy  
Sebaceous cyst Excision  
Secondary Wound Closure  
Skin Graft  
Skin Lesions, Excision  
Stitch Granuloma, Excision  
Stoma Revision  
Suture Removal  
Temporal Artery, Biopsy  
Thyroglossal Duct Cyst, Excision  
Umbilical Herniorrhaphy  
Varicose Vein, Excision and Erasure  
Vermillionectomy(Upper or Lower)  
(Both Lips)  
Lip, Wedge Ressection

Bartholin Cyst, Excision, I & D  
Cervical Cone  
Cervical Dilitation  
Cervical, Biopsy  
Cervical, Polypectomy  
Condylomata Accumulata, Laser Excision  
Culdagentesis  
Culdoscopy  
D&C, Polypectomy  
D&C  
D&D, Conization  
Episiotomy Repair of, Revision  
Exam (GYN) under anesthesia  
Hymenotomy  
Hysterosalpingogram  
IUD, Removal  
Labial Lesion, Excision  
Laparoscopy-Diagnostic  
Laparoscopy, Bilateral Tubal Coagulation - Dilatation & currettage  
Laparoscopy, Bilateral Tubal Coagulation Low Voltage  
Laparoscopy, Bilateral Tubal Coagulation  
Perinorrhaphy, Mini A/P Repair  
Therapeutic Abortion - D&C Suction  
Tubal Insufflation

## GYN, Continued

Vaginal Stenosis, Revision  
Vaginal Tumor, Excision  
Vaginoplasty  
Vulvar Lesions, Biopsy  
Vulvar Warts, Excision, Fulgeration, Laser Exc.

## NEUROSURGICAL

Carpal Tunnel Decompression  
Mortons Neuroma, Excision  
Neuroma, Excision  
Scalp Lacerations, Repair  
Scalp Wounds, Secondary Repair, I&D  
Temporal Artery, Biopsy  
Ulnar Nerve Transfer

## ORAL

Extractions, Full Mouth  
Extractions Partial  
Impacted Teeth, Removal  
Peridental Surgery  
Restorative Dentistry

## ORTHOPEDIC

Amputation, Toes, Fingers  
Amputation Revision, Arm, Leg  
Amputation Revision, Toes, Fingers  
Arthrodesis  
Arthroplasty  
Arthroscopy- Diagnostic  
Arthroscopy, Operative  
Arthrotomy  
Arthrotomy with Arthroscopy  
Bone Graft - Toes, Fingers  
Bunionectomy - Bilateral  
Bunionectomy - Unilateral  
Bursae, Excision  
Carpal Tunnel Decompression  
Cast Change With Manipulation  
Cast Change - Arm, Leg  
Closed Reduction Fracture with X-Ray  
Closed Reduction Fracture without X-Ray  
Exostosis - Excision  
Fingernail, Toenail, Excision  
Foreign Body Removal  
Ganglion - Excision  
Hammertoes/Tenatomies/Ressection of Bones  
Hand Surgery - Traumatic Repair  
Hand Surgery Reconstructive  
Hardware, Removal  
Manipulation Joints with X-Ray  
Manipulation Joints without X-Ray

## ORTHOPEDIC Continued

Metatarsal Head, Excision Bilateral  
Metatarsal Head Excision Unilateral  
Morton's Neuroma  
Nerve Repair - with Microscope  
Nerve Repair - without Microscope  
Neuroma  
Open Reduction Fracture - with X-Ray - toes, fingers  
Open Reduction Fracture - without X-Ray - toes, fingers  
Olecranon Bursa, Excision  
Osteotomy  
Phalangectomy  
Plantar Wart, Excision, Fulgeration, Laser Excision  
Prosthesis Replacement - Toe  
Shoulder, frozen - Manipulation, Injection  
Signovectomy  
Tendon, Repair  
Tendon Sheath, Release  
Tenosynovectomy  
Trigger finger, Release  
Ulnar Nerve Transfer  
Z-plasty

## PLASTIC

Augmentation Mammoplasty (Bilateral)  
Augmentation Mammoplasty (Unilateral)  
Augmentation Mammoplasty with Reconstruction Bilateral  
Augmentation Mammoplasty with Reconstruction Unilateral  
Blepharoplasty - Upper and Lower  
Blepharoplasty - Upper and Lower  
Chin Prosthesis - Insertion/Removal  
Dermabrasion  
Flap, Revision  
Keloid, Excision  
Lipectomy  
Otoplasty, Bilateral  
Otoplasty, Unilateral  
Reduction Mammoplasty  
Removal/Exchange - Breast Implants Bilateral  
Removal/Exchange - Breast Implants Unilateral  
Rhinoplasty  
Rhytidectomy  
Scar Revision - Single Multiple  
Septoplasty- Nasal Septal Reconstruction/SMR  
Skin Graft - Full Thickness  
Skin Graft - Split Thickness  
Skin Lesions, Excision  
Suture Removal  
Vermilionectomy  
Wedge Resection Lip  
Z-Plasty - large, face etc  
Z-plasty - small- finger etc

## UROLOGICAL

Circumcision - Adult  
Circumcision - Pediatric  
Cystoscopy  
Cystoscopy with operative procedure  
Cystometrogram  
Cystometrogram with cystoscopy  
Fulgeration Penile Warts  
Hydrocelectomy  
Meatotomy  
Prostate Biopsy  
Testicular Biopsy  
Urethral Dilatation  
Vasectomy

## SPECIAL CHARGES

Electroshock Therapy  
Nerve Blocks - Intercostal  
Nerve Blocks - Lumbar Sympathetic  
Nerve Blocks - Stellate

**APPENDIX B**

**Physician Questionnaire (Blank)**

## AMBULATORY SURGERY QUESTIONNAIRE

(Please Type or Print Responses)

1. The following procedures are those most commonly performed by my department/service at WBAMC. (Please feel free to include procedures not listed on the attached sheet).

### SURGICAL PROCEDURES

### APPROXIMATE MONTHLY CASELOAD

- a.
- b.
- c.
- d.
- e.
- f.
- g.
- h.

Please list at least the top four most common procedures. List more if these procedures represent a significant portion of your overall caseload.

2. Do you have experience with an organized ambulatory surgery program?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

3. If your response to question 2 was yes, please list those aspects of ambulatory surgery which you consider to be positive or negative.

Positive aspects:

Negative aspects:

4. Should WBAMC offer an organized ambulatory surgery program for your patients, what do you feel would be the level of utilization of such services by yourself and your staff?

\_\_\_\_\_ Frequently

\_\_\_\_\_ Occasionally

\_\_\_\_\_ Rarely

\_\_\_\_\_ Never

Comments:

5. Overall do you feel that an organized ambulatory surgery program would be beneficial?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

Comments:

6. If you desire to make any additional comments which would benefit this study, please make them below.



**APPENDIX C**

**Request to Patient Administration Systems  
and Biostatistics Agency (PASBA)**



DEPARTMENT OF THE ARMY  
WILLIAM BEAUMONT ARMY MEDICAL CENTER  
EL PASO, TEXAS 79920

HSNM-MEC

18 January 1982

SUBJECT: Request for Surgical Workload Data

Commander  
Patient Administration Systems  
and Biostatistics Agency  
ATTN: HSHI-QBS (Terri Beam)  
Fort Sam Houston, Texas 78234

1. As a part of my academic requirements for the US Army/Baylor University Program in Health Care Administration I am conducting a study to determine the feasibility of implementing a formal Ambulatory Surgery Program at William Beaumont Army Medical Center (WBAMC). In order to forecast the demand for such a program it is necessary to determine WBAMC's past workload for various surgical procedures.
2. Listed at Inclosure 1 are the ICDA-9 coded procedures for which I request data. I would like the total number of cases, plus bed days, on a monthly basis from January 1980, to the most current month for which data are available. I would also like to have a column giving the total number of cases and bed days for each surgical procedure. Inclosure 2 is a recommended format, which may be varied to accommodate your computer programs.
3. Please note that I do not desire data to be reported on surgical procedures that were performed in conjunction with other procedures, unless this is specifically indicated at Inclosure 1.
4. From a telephone conversation with Mrs. Graves, I understand that you may be able to retrieve data for WBAMC surgical cases that resulted in a hospital stay of 1-3 days. Such data would be very valuable to this study. I request such data in any format you can provide, but preferably on a monthly basis by ICDA code. A format such as that at Inclosure 2 would be the most acceptable.
5. Once you have reviewed this request, please call me at Autovon 979-2401/2450/2203 with any questions. Address the completed project as follows:

Headquarters  
William Beaumont Army Medical Center  
ATTN: Administrative Resident (MAJ Koehler)  
El Paso, Texas 79920

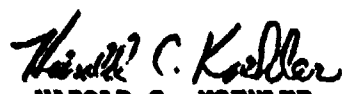
MSHM-MEC

18 January 1982

SUBJECT: Request for Surgical Workload Data

6. I certainly appreciate your valuable service.

2 Incl  
as

  
HAROLD C. KOEHLER  
Major, MSC  
Administrative Resident

REQUESTED PROCEDURES

PLASTIC SURGERY

CODE                      SURGICAL PROCEDURES

5-875	Breast Surgery (Reduction, augmentation, reconstruction, etc)
5-874	
5-873	
5-090	Eyelid surgery (bleph., tarsal folds, ptosis)
5-096	
5-217	Surgery of nose (Rhino., septorhino, fractures)
5-900	Facial cosmetic surgery (Rhytido., chem peel, etc.)
5-901	Abdominoplasty
5-898	Cleft lips and palate
5-275	
5-891	Scar revisions (Including skin grafts and flaps)
5-893	

ENT

5-203	Mastoidectomy and Tympanoplasty
5-194 thru 5-195	
5-281	
5-282	
5-217	Septal reconstruction/Septoplasty SMR
5-200	Myringotomy (with or without tubes)
5-221	Sinus Surgery (Antral Window, Caldwell-Luc)
5-222	
5-191	Stapedectomy

### ORTHOPAEDICS

5-782	Bunionectomies
5-813	Small joint arthroplasties
5-819	
5-043	Carpal tunnel release
5-822	Ganglion excision
5-802	
5-040	
5-051	
5-788	Hardware removal
8-837	Extension tendon repair
5-824-	
5-827	
1-697	Arthroscopy

### OPHTHALMOLOGY

5-144	Cataract extraction
5-145	
5-146	
5-100-	Muscle
5-109	
5-125	Penetrating keratoplasty
5-096	Blepharoplasty
1-831	Probing of nasolacrimal system in children

### OBSTETRICS/GYNECOLOGY

5-663	Laparoscopic or mini lap sterilization
5-690	D & C (Therapeutic-Diagnostic)
5-753	Genetic Amniocentesis
5-671	Cervical Conization
3-918	Laser Therapy of Vulva, CX, and vagina
5-690	Suction D&C for incomplete abortion

GENERAL SURGERY

5-530            Inguinal Herniorrhaphy (Adult unilateral)  
5-511            Cholecystectomy  
5-530            Pediatric herniorrhaphy  
5-066            Thyroglossal duct cyst  
5-883-           Excisions  
5-712           5-242           5-112           5-261           8-186  
5-909           5-860           5-612           5-641  
5-243           5-884           5-712           5-181  
5-091           5-631

UROLOGY

6-652           Cystosopies (Ped) (Op procedure)  
1-563           Prostatic biopsies  
5-585           Urethral dilations  
5-981           Vasectomies  
5-636

ORAL SURGERY

5-230           Removal of teeth  
5-231  
5-246           Application and removal of arch bars  
8-389  
5-784           Minor osteotomies  
5-785  
1-545           Biopsy or excision of lesions  
5-273

PERIPHERAL VASCULAR SURGERY

3-329           Angiography

**APPENDIX D**

**Workload Data**  
**(Includes Report 1, 2b and 3b)**

**Explanatory Notes:**

**1. Reports are as follows:**

a. Selected sole surgical procedures (Report 1) with pages a and b, Jan - Jun and Jul - Dec\* and yearly total, respectively.

b. All surgeries with 1 to 3 days length of stay -

Report 2a - 3 digit codes for 1980

Report 2b - 4 digit codes for 1980

Report 3a - 3 digit codes for 1981

Report 3b - 4 digit codes for 1981

2. Surgical codes used are those published in the International Classification of Procedures in Medicine (ICPM).

3. Report excludes carded for record only (CRO) cases.

4. Data exclude surgical procedures that were performed in another hospital or another facility, not a hospital.

\* 5. Data for December 1981 are not available at this time.

SOURCE: Individual Patient Data System (IPDS) (RCS MED-345)

**PREPARED BY:**

Department of the Army

US Army Patient Administration Systems

and Biostatistics Activity

NSHI-QBS

11 FEB 1982



# Report 1

Selected Sole Surgical Procedures, WBAMC, Jan - Dec 80

	Jan		Feb		Mar		Apr		May		Jun	
	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days
5873-Other repair and plastic operation on breast	-	-	-	-	-	-	3	31	1	4	2	20
5874-Reduction mammoplasty	2	17	2	12	-	-	1	3	3	14	5	32
5873-Augmentation mammoplasty	1	3	2	4	-	-	2	3	1	2	1	2
5090-Incision of eyelid	-	-	-	-	1	2	-	-	-	-	-	-
5096-Other repair of eyelids	4	11	3	6	5	12	3	7	3	10	3	9
5217-Repair and plastic operations on nose	4	26	10	40	10	42	6	30	5	22	6	32
5900-Facial rhytidectomy	-	-	2	9	1	4	-	-	3	15	1	18
5901-Size reduction plastic operation	-	-	1	16	2	-	1	7	1	2	1	14
5898-Plastic operations on lip & external mouth	1	1	-	-	-	-	1	4	1	3	-	-
5275-Palatoplasty	1	9	-	-	1	4	-	-	3	13	2	12
5891-Relaxation of scar or contracture of skin	1	7	2	17	-	-	-	-	1	67	-	-
5893-Other free skin grafts	-	-	2	7	-	-	-	-	-	-	-	-
5203-Mastoidectomy	-	-	-	-	-	-	-	-	-	-	-	-
5194-Myringoplasty	-	-	-	-	2	6	-	-	1	2	1	2
5193-Other tympanoplasty	2	6	-	-	-	-	-	-	-	-	-	-
5281-Tonsillectomy (w/o adenoidectomy)	2	8	7	28	5	19	2	10	3	19	2	6
5282-Tonsillectomy with adenoidectomy	1	1	1	3	-	-	-	-	-	-	-	-
5285-Adenoidectomy (w/o tonsillectomy)	-	-	-	-	-	-	1	2	-	-	2	11
5200-Myringotomy	2	2	3	4	-	-	4	4	-	-	-	-
5221-Intranasal antrotomy	-	-	-	-	-	-	-	-	-	-	-	-
5222-External maxillary antrotomy	-	-	-	-	1	4	-	-	2	10	-	-
5191-Stapedectomy	1	4	-	-	-	-	-	-	-	-	-	-
5782-Osteotomy for hallux valgus	2	5	2	6	1	7	4	27	3	8	-	-
5813-Arthroplasty of foot and toe	1	2	1	8	1	2	-	-	1	4	-	-
5819-Other repair of joint structure	-	-	-	-	-	-	-	-	-	-	-	-
5083-Freeing of adhesions & decompression of nerve	5	10	3	7	6	14	10	33	5	12	2	16
5822-Excision of lesion of muscle, tendon & fascia of hand	4	8	2	4	2	4	-	-	2	4	2	4
5802-Excision or destruction of lesion of joint	1	2	-	-	-	-	-	-	-	-	-	-

\*\* See Notes at End of Report \*\*

# Report 1

Selected Sole Surgical Procedures, WBANC, Jan - Dec 80

	Jul		Aug		Sep		Oct		Nov		Dec		Total	
	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days
5875-Other repair and plastic operation on breast	-	-	4	27	-	-	1	3	2	11	-	-	13	96
5874-Reduction mammoplasty	1	4	-	-	3	26	2	27	2	8	1	3	22	146
5873-Augmentation mammoplasty	4	17	5	21	3	12	2	4	1	3	-	-	22	71
5090-Incision of eyelid	-	-	-	-	1	3	-	-	-	-	-	-	2	5
5096-Other repair of eyelids	2	5	4	8	2	4	3	6	2	4	2	5	36	87
5217-Repair and plastic operations on nose	6	40	9	51	7	39	6	24	6	44	5	22	80	412
5900-Facial rhytidectomy	-	-	-	-	2	10	4	18	1	5	1	4	15	83
5901-Size reduction plastic operation	2	19	2	23	-	-	1	9	1	18	-	-	10	106
5898-Plastic operations on lip & external mouth	1	8	2	22	-	-	1	16	-	-	2	8	7	38
5275-Palatoplasty	2	8	-	-	-	-	-	-	-	-	-	-	4	37
5891-Relaxation of scar or contracture of skin	2	8	-	-	-	-	-	-	-	-	1	5	11	62
5893-Other free skin grafts	-	-	3	46	1	18	1	1	1	16	-	-	9	155
5203-Mastoidectomy	-	-	-	-	-	-	-	-	-	-	1	11	1	11
5194-Myringoplasty	2	6	1	4	-	-	2	4	-	-	1	2	10	26
5195-Other tympanoplasty	-	-	2	9	-	-	-	-	-	-	-	-	4	15
5281-Tonsillectomy (w/o adenoidectomy)	1	4	2	8	6	23	3	12	2	6	-	-	35	143
5282-Tonsillectomy with adenoidectomy	-	-	1	2	-	-	1	2	2	4	-	-	6	12
5285-Adenoidectomy (w/o tonsillectomy)	-	-	-	-	-	-	-	-	-	-	2	4	5	17
5200-Myringotomy	2	6	2	2	1	1	2	2	3	3	3	4	22	28
5221-Intranasal antrotomy	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5222-External maxillary antrotomy	-	-	-	-	-	-	-	-	-	-	-	-	3	14
5191-Stapedectomy	-	-	-	-	-	-	-	-	-	-	-	-	1	4
5782-Ostectomy for hallux valgus	-	-	-	-	2	9	2	10	1	13	-	-	17	85
5813-Arthroplasty of foot and toe	-	-	1	4	-	-	-	-	-	-	-	-	5	20
5819-Other repair of joint structure	-	-	-	-	-	-	-	-	1	39	-	-	1	39
5043-Freeing of adhesions & decompression of nerve	4	10	5	11	3	6	5	14	3	9	5	10	66	152
5822-Excision of lesion of muscle, tendon & fascia of hand	2	4	-	-	-	-	-	-	1	2	-	-	15	30
5802-Excision or destruction of lesion of joint	-	-	-	-	-	-	-	-	-	-	-	-	1	2

\*\* See Notes at End of Report \*\*

# Report 1

Selected Sole Surgical Procedures, WBAWC, Jan - Dec 80

	Jan		Feb		Mar		Apr		May		Jun	
	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days
5040-Division and excision of nerve	-	-	-	-	-	-	-	-	-	-	-	-
5051-Sympathectomy	-	-	-	-	-	-	-	-	-	-	1	4
5788-Removal of internal fixation appliance	4	14	3	70	4	18	3	13	4	14	2	11
5837-Other plastic operations on muscle, tendon and fascia	-	-	1	2	-	-	-	-	-	-	-	-
5824-Suture of muscle, tendon & fascia of hand	-	-	1	5	2	4	-	-	2	10	1	4
5825-Transplantation of muscle and tendon of hand	-	-	-	-	-	-	-	-	-	-	-	-
5826-Reconstruction of thumb	-	-	-	-	-	-	-	-	-	-	-	-
5827-Plastic operation on hand with graft or implant	-	-	-	-	-	-	-	-	-	-	2	39
1697-Arthroscopy	5	36	2	13	4	16	4	24	3	24	2	23
5144-Intracapsular extraction of lens	6	20	15	56	10	34	9	60	6	24	6	21
5145-Extracapsular extraction of lens	-	-	-	-	3	22	-	-	-	-	2	10
5146-Other cataract extraction	-	-	1	4	-	-	1	5	2	8	-	-
5100-Nyotomy and tenotomy of ocular muscles	-	-	-	-	-	-	-	-	-	-	-	-
5101-Excision of ocular muscle or tendon	2	4	2	5	1	4	4	8	-	-	2	4
5102-Advancement or recession of ocular muscle	1	2	-	-	1	4	4	8	1	2	2	4
5103-Transposition of ocular muscle	-	-	-	-	-	-	-	-	-	-	-	-
5104-Other shortening of ocular muscle	-	-	-	-	-	-	-	-	-	-	-	-
5105-Freeing of adhesions of ocular muscle	-	-	-	-	-	-	-	-	-	-	-	-
5109-Other operations on ocular muscle	-	-	-	-	-	-	-	-	-	-	-	-
5125-Corneal transplant	-	-	-	-	-	-	-	-	-	-	-	-
1831-Probing of nasolacrimal duct	-	-	-	-	-	-	-	-	-	-	2	2
5663-Bilateral endoscopic destruction or occlusion of fallopian tubes	4	8	11	26	11	25	13	28	8	16	6	12
5690-Dilation and curettage (of uterus)	19	26	12	13	15	28	22	28	22	31	24	27
5753-Amniocentesis	-	-	1	1	1	1	5	9	5	14	4	17
5671-Conization of cervix	-	-	-	-	-	-	1	2	-	-	-	-
3918-Other application of laser beam	-	-	-	-	-	-	-	-	-	-	-	-

\* \* See Notes at End of Report \* \*

# Report 1

Selected Sole Surgical Procedures, VBAWC, Jan - Dec 80

	Jul		Aug		Sep		Oct		Nov		Dec		Total	
	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days
5040-Division and excision of nerve	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5051-Sympathectomy	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5788-Removal of internal fixation appliance	2	7	3	52	3	8	-	-	1	4	-	-	29	211
5837-Other plastic operations on muscle, tendon and fascia	1	2	-	-	-	-	-	-	-	-	-	-	2	4
5824-Suture of muscle, tendon & fascia of hand	-	-	-	-	-	-	1	2	1	3	-	-	8	28
5825-Transplantation of muscle and tendon of hand	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5826-Reconstruction of thumb	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5827-Plastic operation on hand with graft or implant	-	-	-	-	-	-	1	25	-	-	1	5	4	69
1697-Arthroscopy	2	26	5	24	1	4	1	6	1	4	-	-	30	200
5144-Intracapsular extraction of lens	5	33	4	11	2	6	7	28	2	11	8	38	80	362
5145-Extracapsular extraction of lens	-	-	-	-	1	4	2	9	1	5	1	7	10	57
5146-Other cataract extraction	1	8	1	3	-	-	-	-	-	-	1	5	7	33
5100-Myotomy and tenotomy of ocular muscles	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5101-Excision of ocular muscle or tendon	1	2	-	-	2	13	-	-	2	4	3	7	19	51
5102-Advancement or recession of ocular muscle	2	4	2	4	4	13	2	4	3	7	5	10	27	62
5103-Transposition of ocular muscle	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5104-Other shortening of ocular muscle	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5105-Freeing of adhesions of ocular muscle	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5109-Other operations on ocular muscle	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5125-Corneal transplant	-	-	-	-	1	4	-	-	-	-	-	-	1	4
1831-Probing of nasolacrimal duct	-	-	-	-	-	-	-	-	-	-	-	-	2	2
5663-Bilateral endoscopic destruction or occlusion of fallopian tubes	17	38	16	35	21	44	11	26	14	34	3	6	135	298
5690-Dilation and curettage (of uterus)	15	19	15	18	11	17	26	30	14	22	25	33	220	292
5753-Amniocentesis	2	7	5	5	1	1	4	4	3	3	4	4	35	66
5671-Conization of cervix	-	-	-	-	-	-	-	-	-	-	-	-	1	2
3918-Other application of laser beam	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\* \* See Notes at End of Report \* \*

# Report 1

Selected Sole Surgical Procedures. WBAVC, Jan - Dec 80

	Jan		Feb		Mar		Apr		May		Jun	
	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days
5530-Repair of inguinofoemoral hernia	14	58	14	46	15	80	16	76	16	74	9	44
5066-Excision of thyroglossal tract	-	-	2	7	-	-	-	-	-	-	-	-
5883-Surgical toilet of wound or infected tissue	1	3	4	15	2	9	4	28	5	28	2	32
5712-Other local excision or destruction of vulva and perineum	-	-	1	4	-	-	-	-	-	-	-	-
5909-Other operations	-	-	-	-	-	-	-	-	-	-	-	-
5243-Excision of dental lesion of jaw	-	-	-	-	-	-	-	-	-	-	-	-
5091-Excision or destruction of eyelid	-	-	-	-	-	-	-	-	2	6	-	-
5242-Other operations on gum	-	-	-	-	-	-	-	-	-	-	-	-
5860-Local excision of lesion of breast	-	-	-	-	1	2	-	-	-	-	1	1
5884-Local excision or destruction of skin and subcutaneous tissue	5	25	5	10	12	45	5	25	3	24	6	21
5631-Excision of cyst of epididymis	1	7	-	-	-	-	-	-	-	-	-	-
5112-Excision of lesion of conjunctiva	-	-	-	-	-	-	-	-	-	-	-	-
5612-Excision or destruction of scrotal lesion	-	-	-	-	-	-	1	8	-	-	-	-
5261-Excision of lesion of salivary gland	-	-	-	-	-	-	-	-	1	5	-	-
5641-Local excision or destruction of penis	-	-	-	-	-	-	-	-	-	-	-	-
5181-Excision or destruction of lesion of external ear	-	-	-	-	-	-	-	-	-	-	-	-
8186-Removal of nail	1	2	-	-	-	-	1	15	-	-	1	3
1652-Cystoscopy	2	6	2	8	1	5	1	2	1	3	2	17
1563-Prostate	-	-	-	-	-	-	1	1	1	9	-	-
5585-Dilation of urethra	-	-	-	-	-	-	-	-	-	-	-	-
5981-Surgical operations to produce male sterilization	-	-	-	-	-	-	-	-	-	-	-	-
5636-Vasectomy	-	-	-	-	-	-	-	-	-	-	-	-
5230-Forceps extraction of tooth	-	-	2	59	2	162	1	27	-	-	-	-
5231-Surgical removal of tooth	-	-	1	3	-	-	-	-	1	8	-	-
5246-Application of orthodontic appliances	-	-	-	-	-	-	-	-	-	-	-	-
8389-Removal of other fixation	-	-	-	-	-	-	-	-	-	-	-	-
5784-Partial osteotomy	1	11	3	27	1	20	3	11	3	13	2	11

\*\* See Notes at End of Report \*\*

# Report 1

Selected Sole Surgical Diagnosis, WBAMC, Jan - Dec 80

	Jul		Aug		Sep		Oct		Nov		Dec		Total	
	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days
5530-Repair of inguinofoemoral hernia	12	63	22	111	15	86	14	96	11	53	15	71	173	858
5066-Excision of thyroglossal tract	-	-	-	-	-	-	1	4	-	-	3	13	6	24
5883-Surgical toilet of wound or infected tissue	4	11	4	15	2	6	6	8	2	17	1	13	37	185
5712-Other local excision or destruction of vulva and perineum	-	-	-	-	1	2	-	-	-	-	1	2	3	8
5909-Other operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5243-Excision of dental lesion of jaw	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5091-Excision or destruction of eyelid	1	2	-	-	-	-	1	1	-	-	-	-	4	9
5242-Other operations on gum	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5860-Local excision of lesion of breast	-	-	1	5	-	-	-	-	-	-	-	-	3	8
5884-Local excision or destruction of skin and subcutaneous tissue	7	21	4	9	7	51	6	35	2	2	2	5	64	283
5631-Excision of cyst of epididymis	-	-	-	-	1	7	-	-	1	7	-	-	3	21
5112-Excision of lesion of conjunctiva	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5612-Excision or destruction of scrotal lesion	-	-	-	-	-	-	-	-	-	-	1	7	1	8
5261-Excision of lesion of salivary gland	-	-	-	-	-	-	-	-	-	-	2	2	2	12
5641-Local excision or destruction of penis	-	-	-	-	-	-	1	1	-	-	-	-	1	1
5181-Excision or destruction of lesion of external ear	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8186-Removal of nail	-	-	2	6	3	3	-	-	-	-	-	-	8	29
1652-Cystoscopy	3	28	-	-	2	5	2	9	-	-	2	3	18	86
1563-Prostate	-	-	-	-	1	3	-	-	-	-	1	1	4	14
5585-Dilation of urethra	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5981-Surgical operations to produce male sterilization	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5636-Vasectomy	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5230-Forceps extraction of tooth	-	-	1	5	1	6	1	1	-	-	2	8	10	248
5231-Surgical removal of tooth	2	6	2	7	5	16	3	7	-	-	1	3	15	50
5246-Application of orthodontic appliance	-	-	-	-	1	1	-	-	-	-	-	-	1	1
8189-Removal of other fixation	-	-	-	-	2	17	-	-	-	-	-	-	2	17
5784-Partial ostectomy	1	6	4	38	2	8	3	20	1	3	3	20	27	188

\* \* See Notes at End of Report \*

# Report 1

Selected Sole Surgical Procedures, WBAWC, Jan - Dec 80

	<u>Jan</u>		<u>Feb</u>		<u>Mar</u>		<u>Apr</u>		<u>May</u>		<u>Jun</u>	
	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days
5785-Total ostectomy	-	-	-	-	-	-	-	-	1	2	-	-
1545-Surgical biopsy, mouth, other	-	-	-	-	-	-	-	-	-	-	-	-
5273-Excision of other parts of the mouth	-	-	-	-	-	-	-	-	-	-	-	-
3329-Other arteriography (angiography) of thorax	-	-	-	-	1	6	-	-	1	3	1	7

\* \* See Notes at End of Report \* \*

Report 1

Selected Sole Surgical Procedures, WNAME, Jan - Dec 80

	Jul		Aug		Sep		Oct		Nov		Dec		Total	
	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days
5785-Total ostectomy	-	-	-	-	-	-	1	6	-	-	-	-	2	8
1545-Surgical biopsy, mouth, other	-	-	2	9	-	-	-	-	-	-	-	-	2	9
5273-Excision of other parts of the mouth	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3329-Other arteriography (angiography) of thorax	-	-	1	2	1	3	-	-	1	2	1	2	7	25



# Report 1

Selected Sole Surgical Procedures, WBAUC, Jan - Nov 81

	Jan		Feb		Mar		Apr		May		Jun	
	No	Days	No	Days	No	Days	No	Days	No	Days	No	Days
5875-Other repair and plastic operation on breast	2	24	3	39	2	23	1	12	-	-	1	2
5874-Reduction mammoplasty	2	8	1	12	1	4	3	52	3	17	1	4
5873-Augmentation mammoplasty	4	16	2	10	2	9	1	2	-	-	-	-
5090-Incision of eyelid	-	-	-	-	-	-	-	-	-	-	-	-
5096-Other repair of eyelids	4	9	1	2	3	15	8	23	5	17	3	7
5217-Repair and plastic operations on nose	8	43	4	14	3	11	2	6	4	15	5	22
5900-Facial rhytidectomy	-	-	1	3	2	9	1	5	1	3	1	11
5901-Size reduction plastic operation	-	-	1	14	1	11	1	10	2	16	1	9
5895-Plastic operations on lip & external mouth	1	8	-	-	-	-	-	-	-	-	2	11
5275-Palatoplasty	-	-	-	-	1	7	-	-	-	-	-	-
5891-Relaxation of scar or contracture of skin	-	-	-	-	2	17	2	25	-	-	1	3
5893-Other free skin grafts	-	-	1	16	3	68	2	50	2	61	-	-
5203-Mastoidectomy	-	-	-	-	-	-	-	-	-	-	-	-
5194-Myringoplasty	-	-	1	4	1	2	2	4	1	2	1	3
5195-Other tympanoplasty	-	-	-	-	1	2	1	2	-	-	-	-
5281-Tonsillectomy (w/o adenoidectomy)	1	2	4	28	5	29	1	6	1	4	4	11
5282-Tonsillectomy with adenoidectomy	1	2	-	-	-	-	-	-	2	4	-	-
5285-Adenoidectomy (w/o tonsillectomy)	-	-	-	-	-	-	-	-	-	-	-	-
5200-Myringotomy	3	3	2	2	2	2	2	2	1	4	2	2
5221-Intranasal anotomy	-	-	-	-	-	-	-	-	-	-	-	-
5222-External maxillary anotomy	-	-	1	3	-	-	1	4	1	14	-	-
5191-Stapedectomy	1	3	3	12	-	-	-	-	1	2	-	-
5782-Osteotomy for hallux valgus	1	6	-	-	1	4	1	6	3	18	2	10
5813-Arthroplasty of foot and toe	-	-	-	-	-	-	2	9	-	-	-	-
5819-Other repair of joint structure	-	-	-	-	-	-	2	32	-	-	-	-
5043-Freeing of adhesions & decompression of nerve	4	13	1	3	8	35	3	15	2	9	2	19
5822-Excision of lesion of muscle, tendon & fascia of hand	-	-	1	2	2	6	-	-	2	7	-	-
5802-Excision or destruction of lesion of joint	-	-	-	-	-	-	-	-	-	-	-	-

\* \* See Notes at End of Report \* \*

# Report 1

Selected Sole Surgical Procedures, WBAUC, Jan - Nov 81

	Jul		Aug		Sep		Oct		Nov		Total	
	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days
5875-Other repair and plastic operation on breast	5	19	2	13	3	25	3	28	-	-	22	185
5874-Reduction mammoplasty	3	12	2	8	2	14	1	3	-	-	19	134
5873-Augmentation mammoplasty	2	5	6	16	3	6	2	12	-	-	22	76
5090-Incision of eyelid	-	-	-	-	-	-	-	-	-	-	-	-
5096-Other repair of eyelids	7	24	3	8	4	26	5	30	-	-	43	161
5217-Repair and plastic operations on nose	3	7	4	32	4	39	13	87	-	-	50	276
5900-Facial rhytidectomy	1	6	2	9	4	23	1	9	-	-	14	78
5501-Size reduction plastic operation	2	12	1	12	3	21	-	-	-	-	12	105
5898-Plastic operations on lip & external mouth	-	-	-	-	-	-	-	-	-	-	-	-
5275-Palaeoplasty	-	-	1	11	-	-	1	7	-	-	3	25
5891-Relaxation of scar or contracture of skin	-	-	-	-	3	11	2	20	-	-	10	76
5893-Other free skin grafts	-	-	1	6	-	-	-	-	-	-	9	201
5203-Mastoidectomy	-	-	-	-	-	-	-	-	-	-	-	-
5194-Myringoplasty	-	-	-	-	2	9	-	-	-	-	2	9
5195-Other tympanoplasty	1	2	2	6	3	19	-	-	-	-	12	42
5281-Tonsillectomy (w/o adenoidectomy)	-	-	-	-	-	-	-	-	-	-	2	4
5282-Tonsillectomy with adenoidectomy	-	-	5	20	5	17	4	21	-	-	30	138
5285-Adenoidectomy (w/o tonsillectomy)	-	-	-	-	-	-	1	3	-	-	4	9
5200-Myringotomy	-	-	-	-	-	-	1	2	-	-	2	2
5721-Intranasal antrostomy	-	-	-	-	-	-	1	1	-	-	13	16
5222-External maxillary antrostomy	-	-	-	-	-	-	-	-	-	-	-	-
5191-Stapedectomy	-	-	-	-	-	-	-	-	-	-	3	21
5782-Osteotomy for hallux valgus	-	-	-	-	-	-	-	-	-	-	5	17
5813-Arthroplasty of foot and toe	2	7	3	13	1	4	2	7	-	-	16	75
5819-Other repair of joint structure	-	-	-	-	-	-	2	9	-	-	4	18
5043-Freeing of adhesions & decompression of nerve	1	16	-	-	1	2	-	-	-	-	4	50
5822-Excision of lesion of muscle, tendon & fascia of hand	2	28	2	9	1	2	-	-	-	-	25	133
5802-Excision or destruction of lesion of joint	3	13	-	-	2	4	-	-	-	-	10	32
	1	8	-	-	-	-	1	3	-	-	2	11

\* See Notes at End of Report \*

# Report 1

Selected Sole Surgical Procedures, WBAVC, Jan - Nov 81

	Jan		Feb		Mar		Apr		May		Jun	
	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days
5040-Division and excision of nerve	-	-	-	-	-	-	-	-	-	-	-	-
5051-Sympathectomy	-	-	-	-	-	-	-	-	-	-	-	-
5788-Removal of internal fixation appliance	2	10	5	45	-	-	3	10	4	34	3	16
5837-Other plastic operations on muscle, tendon and fascia	2	4	-	-	-	-	-	-	-	-	-	-
5824-Suture of muscle, tendon & fascia of hand	1	1	-	-	1	2	1	5	-	-	1	2
5825-Transplantation of muscle and tendon of hand	-	-	1	8	-	-	-	-	-	-	-	-
5826-Reconstruction of thumb	-	-	-	-	-	-	-	-	-	-	-	-
5827-Plastic operation on hand with graft or implant	-	-	1	6	1	13	-	-	1	7	2	18
1697-Arthroscopy	-	-	-	-	-	-	-	-	-	-	-	-
5144-Intracapsular extraction of lens	3	9	5	21	5	24	1	3	4	19	-	-
5145-Extracapsular extraction of lens	1	5	-	-	2	7	3	27	-	-	1	4
5146-Other cataract extraction	-	-	-	-	4	20	-	-	-	-	1	7
5100-Iryotomy and tenotomy of ocular muscles	-	-	-	-	-	-	-	-	-	-	-	-
5101-Excision of ocular muscle or tendon	6	23	-	-	1	5	2	4	-	-	1	2
5102-Advancement or recession of ocular muscle	-	-	4	17	4	13	6	15	1	2	2	4
5103-Transposition of ocular muscle	-	-	-	-	-	-	1	2	-	-	-	-
5104-Other shortening of ocular muscle	-	-	-	-	-	-	-	-	-	-	-	-
5105-Freeing of adhesions of ocular muscle	-	-	-	-	-	-	-	-	1	1	-	-
5109-Other operations on ocular muscle	-	-	-	-	-	-	-	-	-	-	1	5
5123-Corneal transplant	1	1	-	-	4	4	2	2	2	2	4	4
1831-Probing of nasolacrimal duct	-	-	-	-	-	-	-	-	-	-	-	-
5663-Bilateral endoscopic destruction or occlusion of fallopian tubes	8	18	13	31	9	21	13	28	11	27	14	24
5690-Dilation and curettage (of uterus)	14	21	12	20	21	36	18	29	16	31	21	36
5753-Amniocentesis	-	-	-	-	2	2	3	11	3	3	5	5
5671-Canalization of cervix	-	-	-	-	-	-	-	-	-	-	-	-
3918-Other application of laser beam	-	-	-	-	-	-	-	-	-	-	-	-

\* \* See Notes at End of Report \* \*

# Report 1

Selected Sole Surgical Procedures, WDAVC, Jan - Nov 81

	Jul		Aug		Sep		Oct		Nov		Total	
	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days
5040-Division and excision of nerve	-	-	-	-	-	-	-	-	-	-	1	10
5051-Sympathectomy	-	-	-	-	-	-	-	-	-	-	33	203
5788-Removal of internal fixation appliance	2	7	9	46	4	28	1	7	-	-	2	4
5837-Other plastic operations on muscle, tendon and fascia	-	-	-	-	-	-	-	-	-	-	7	52
5824-Suture of muscle, tendon & fascia of hand	2	36	1	6	-	-	-	-	-	-	1	8
5825-Transplantation of muscle and tendon of hand	-	-	-	-	-	-	-	-	-	-	1	8
5826-Reconstruction of thumb	-	-	-	-	1	2	-	-	-	-	1	2
5827-Plastic operation on hand with graft or implant	1	17	3	24	1	52	1	18	-	-	11	155
1697-Arthroscopy	2	14	5	32	5	22	1	4	-	-	31	148
5144-Intracapsular extraction of lens	3	10	1	9	1	3	1	6	-	-	13	71
5145-Extracapsular extraction of lens	-	-	-	-	-	-	-	-	-	-	5	27
5146-Other cataract extraction	-	-	-	-	-	-	-	-	-	-	17	54
5100-Mytomy and tenotomy of ocular muscles	3	7	-	-	2	4	2	9	-	-	34	100
5101-Excision of ocular muscle or tendon	6	14	3	15	3	6	5	14	-	-	-	-
5102-Advancement or recession of ocular muscle	-	-	-	-	-	-	-	-	-	-	1	2
5103-Transposition of ocular muscle	-	-	-	-	-	-	-	-	-	-	1	2
5104-Other shortening of ocular muscle	-	-	-	-	-	-	-	-	-	-	1	1
5105-Frezing of adhesions of ocular muscle	-	-	-	-	-	-	-	-	-	-	2	15
5109-Other operations on ocular muscle	-	-	1	10	-	-	-	-	-	-	16	17
5125-Corneal transplant	1	1	-	-	-	-	2	3	-	-	-	-
1831-Probing of nasolacrimal duct	16	24	15	31	19	40	13	26	1	4	132	274
5663-Bilateral endoscopic destruction or occlusion of fallopian tubes	18	23	15	27	13	25	16	17	2	3	166	268
5690-Dilation and curettage (of uterus)	2	2	6	6	2	2	1	1	-	-	24	32
5753-Amniocentesis	-	-	-	-	-	-	-	-	1	4	1	4
5671-Conization of cervix	-	-	-	-	-	-	-	-	-	-	-	-
3918-Other application of laser beam	-	-	-	-	-	-	-	-	-	-	-	-

\* \* See Notes at End of Report \* \*

# Report 1

Selected Sole Surgical Procedures, WBAMC, Jan - Nov 81

	Jan		Feb		Mar		Apr		May		Jun	
	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days
5530-Repair of inguinofoemoral hernia	9	64	14	74	12	65	15	53	17	77	12	48
5066-Excision of thyroglossal tract	-	-	1	3	1	3	-	-	-	-	-	-
5883-Surgical toilet of wound or infected tissue	1	16	2	11	3	6	5	47	7	26	3	21
5712-Other local excision or destruction of vulva and perineum	-	-	-	-	1	3	-	-	-	-	-	-
5909-Other operations	-	-	-	-	-	-	-	-	-	-	-	-
5243-Excision of dental lesion of jaw	-	-	1	3	-	-	-	-	1	2	-	-
5091-Excision or destruction of eyelid	-	-	-	-	1	9	-	-	-	-	2	14
5242-Other operations on gum	-	-	-	-	-	-	-	-	-	-	-	-
5860-Local excision of lesion of breast	1	3	-	-	1	2	1	5	-	-	-	-
5884-Local excision or destruction of skin and subcutaneous tissue	3	16	2	33	1	3	2	5	9	37	3	8
5631-Excision of cyst of epididymis	1	4	-	-	-	-	-	-	-	-	-	-
5112-Excision of lesion of conjunctiva	-	-	-	-	-	-	-	-	-	-	-	-
5612-Excision or destruction of scrotal lesion	-	-	-	-	-	-	-	-	-	-	-	-
5261-Excision of lesion of salivary gland	-	-	-	-	-	-	-	-	1	3	-	-
5641-Local excision or destruction of penis	-	-	-	-	-	-	-	-	-	-	-	-
5181-Excision or destruction of lesion of external ear	1	7	-	-	1	3	-	-	1	3	-	-
8186-Removal of nail	-	-	-	-	-	-	-	-	-	-	-	-
1652-Cystoscopy	1	3	1	6	1	10	1	1	1	4	2	7
1563-Prostate	-	-	-	-	-	-	-	-	2	5	-	-
5585-Dilation of urethra	-	-	-	-	-	-	-	-	-	-	1	2
5981-Surgical operations to produce male sterilization	-	-	-	-	-	-	-	-	-	-	-	-
5636-Vasectomy	-	-	-	-	-	-	-	-	-	-	-	-
5230-Forceps extraction of tooth	2	23	-	-	1	2	3	37	-	-	-	-
5231-Surgical removal of tooth	4	13	4	10	6	20	1	2	1	1	-	-
5246-Application of orthodontic appliance	-	-	-	-	-	-	-	-	-	-	-	-
8389-Removal of other fixation	-	-	-	-	-	-	-	-	-	-	-	-
5784-Partial ostectomy	3	25	1	4	4	28	6	37	2	17	5	56

\* \* See Notes at End of Report \* \*

Report 1

Selected Sole Surgical Procedures, WBAMC, Jan - Nov 81

	Jul		Aug		Sep		Oct		Nov		Total	
	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days
5530-Repair of inguino-femoral hernia	10	32	18	83	16	79	12	57	2	8	137	640
5066-Excision of thyroglossal tract	1	1	-	-	1	3	-	-	-	-	4	10
5883-Surgical toilet of wound or infected tissue	6	26	7	17	2	7	2	28	-	-	38	205
5712-Other local excision or destruction of vulva and perineum	-	-	-	-	-	-	-	-	-	-	1	3
5909-Other operations	-	-	-	-	-	-	-	-	-	-	1	3
5243-Excision of dental lesion of jaw	-	-	-	-	-	-	-	-	-	-	1	2
5091-Excision or destruction of eyelid	-	-	1	19	-	-	-	-	-	-	4	42
5242-Other operations on gum	1	1	-	-	-	-	-	-	-	-	1	1
5860-Local excision of lesion of breast	-	-	-	-	-	-	1	7	-	-	4	17
5884-Local excision or destruction of skin and subcutaneous tissue	4	13	5	22	5	19	-	-	-	-	34	156
5631-Excision of cyst of epididymis	-	-	1	6	-	-	-	-	-	-	2	10
5112-Excision of lesion of conjunctiva	-	-	-	-	-	-	1	5	-	-	1	5
5612-Excision or destruction of scrotal lesion	-	-	-	-	-	-	-	-	-	-	-	-
5261-Excision of lesion of salivary gland	-	-	-	-	-	-	-	-	-	-	1	3
5641-Local excision or destruction of penis	-	-	-	-	-	-	-	-	-	-	-	-
5181-Excision or destruction of lesion of external ear	-	-	-	-	1	2	-	-	-	-	4	15
8186-Removal of nail	-	-	-	-	-	-	-	-	-	-	-	-
1652-Cystoscopy	-	-	1	3	1	3	2	7	-	-	11	44
1563-Prostate	-	-	1	8	-	-	-	-	-	-	3	13
5585-Dilation of urethra	-	-	1	9	-	-	-	-	-	-	2	11
5981-Surgical operations to produce male sterilization	-	-	-	-	-	-	-	-	-	-	-	-
5636-Vasectomy	-	-	-	-	-	-	1	6	-	-	1	6
5230-Forceps extraction of tooth	-	-	-	-	-	-	-	-	-	-	6	62
5231-Surgical removal of tooth	4	40	3	4	5	12	6	11	-	-	34	113
5246-Application of orthodontic appliance	-	-	-	-	-	-	-	-	-	-	-	-
8389-Removal of other fixation	-	-	-	-	-	-	-	-	-	-	-	-
5784-Partial osteotomy	1	7	1	13	1	4	2	17	-	-	26	208

\* \* See Notes at End of Report \* \*

Report 1

Selected Sole Surgical Procedures, WBANC, Jan - Nov 81

	Jan		Feb		Mar		Apr		May		Jun	
	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days
5785-Total ostectomy	-	-	-	-	1	4	-	-	-	-	1	4
1545-Surgical biopsy, mouth, other	-	-	-	-	-	-	-	-	-	-	-	-
5273-Excision of other parts of the mouth	-	-	-	-	-	-	1	4	-	-	-	-
3329-Other arteriography (angiography) of thorax	-	-	-	-	-	-	-	-	-	-	-	-

\* \* See Notes at End of Report \* \*

# Report 1

Selected Sole Surgical Procedures, WRAHC, Jan - Nov 81

	<u>Jul</u>		<u>Aug</u>		<u>Sep</u>		<u>Oct</u>		<u>Nov</u>		<u>Total</u>	
	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days	No	Bed Days
5785-Total ostectomy	-	-	-	-	-	-	1	6	-	-	3	14
1545-Surgical biopsy, mouth, other	-	-	-	-	-	-	-	-	-	-	-	-
5273-Excision of other parts of the mouth	-	-	-	-	-	-	-	-	-	-	1	4
3329-Other arteriography (angiography) of thorax	1	13	-	-	-	-	-	-	-	-	1	13

## Footnotes:

1. Surgical code 5981 (Surgical Operations to Produce Male Sterilization) was not used by the Army after June 1980.
2. Days used were bed days this MTF.
3. Dash (-) indicates zero frequency.
4. Procedures applicable to more than one of the requested groups appear only in the first reporting group.

SOURCE: Individual Patient Data System (IPDS) (RCS MED-345)

PREPARED BY:  
Department of the Army  
US Army Patient Administration Systems  
and Biostatistics Activity  
BETH-QAS 11 FEB 1982



Report 2b

INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
1 1272	CENTRAL VENCUS PRESSURE MEASURE	23
2 1273	IMFRAVENOUS CATHE- TERIZATION, HEART	35
3 1275	RETROGRADE CATHE- TERIZATION CF LEFT HEART	16
4 1278	OTHER CATHETER- IZATION OF HEART	1
5 1334	OTHER CYSTOMETRY	2
6 1350	INTERNAL CLINICAL GYM EXAMINATION	3
7 1363	ELECTROMYOGRAPHY	3
8 1402	PERCUTANEOUS BIOPSY OF NERVE	1
9 1420	BIOPSY OF LARYNX BY LARYNGOSCOPY	4
10 1425	BONE MARRON BIOPSY	2
11 1426	LYMPHATIC BIOPSY	1
12 1432	BIOPSY OF BRONCHUS BY ENDOSCOPY	1
13 1440	BIOPSY ESOPHAGUS BY ENDOSCOPY	12
14 1441	BIOPSY OF STOMACH BY ENDOSCOPY	12
15 1450	BIOPSY OF COLON BY ENDOSCOPY	26
16 1451	BIOPSY OF SIGMOID COLON BY ENDOSCOFY	1
17 1453	BIOPSY OF ANUS AND PERIANAL REGION	1
18 1454	LIVER PERCUTANEOUS BIOPSY	29

## Report 2b

PAGE 2 SURGICAL PROCEDURES WITH 1 TO 3 DAYS LENGTH OF STAY PROGRAM IO S349  
 WILLIAM BEAJMONT ARMY MEDICAL CENTER  
 CY 80

INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
19 1460	PERCUTANEOUS BIOPSY OF KIDNEY	3
20 1463	BIOPSY OF PROSTATE	9
21 1471	ENDOMETRIAL BIOPSY	2
22 1473	ENDOCERVICAL BIOPSY	1
23 1475	OTHER, UNSPECIFIED CERVICAL BICFSY	40
24 1482	BREAST BIOPSY	1
25 1484	BONE OR JOINT BIOPSY	1
26 1500	SURGICAL BIOPSY OF SKIN, SUBCUTANEOUS TISSUE	2
27 1501	SURGICAL BIOPSY OF BREAST	1
28 1502	SURGICAL BICFSY OF MUSCLE	1
29 1503	SURGICAL BIOPSY OF BONE	4
30 1504	SURGICAL BICFSY OF JOINT	1
31 1540	SURGICAL BIOPSY, LIP	2
32 1544	SURGICAL BICFSY OF PALATE, UVULA	1
33 1545	SURGICAL BICFSY OF MOUTH, OTHER PARTS	1
34 1551	SURGICAL BIOPSY OF LIVER	1
35 1556	SURGICAL BIOPSY OF COLON	3
36 1557	SURGICAL BIOPSY OF RECTUM	2

## Report 2b

PROGRAM IO S349

PAGE 3 SURGICAL PROCEDURES WITH 1 TO 3 DAYS LENGTH OF STAY  
WILLIAM BEAUMONT ARMY MEDICAL CENTER  
CY 40

INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
37 1563	SURGICAL BIOPSY OF PROSTATE	2
38 1565	SURGICAL BIOPSY OF TESTIS	1
39 1571	SURGICAL BIOPSY OF CERVIX	8
40 1572	SURGICAL BIOPSY OF VAGINA	1
41 1573	SURGICAL BIOPSY OF VULVA	2
42 1586	SURGICAL BIOPSY OF SUPERFICIAL LYMPH NODE	3
43 1620	BRONCHOSCOPY	1
44 1630	ESOPHAGOSCOPY	7
45 1632	ESOPHAGOGASTROS- COPY	3
46 1633	GASTROSCOPY	8
47 1636	DUODENOSCOPY	3
48 1640	INTESTINAL ENDOS- COPY VIA EXISTING STOMA	1
49 1641	COLONOSCOPY	51
50 1642	SIGMOIDOSCOPY	2
51 1643	PROCTOSCOPY	22
52 1650	URETEROSCOPY	1
53 1652	CYSTOSCOPY	26
54 1655	URETHROSCOPY	1
55 1660	HYSTEROSCOPY	1
56 1663	COLPOSCOPY	12

Report 2b

PROGRAM ID S349

PAGE 4 SURGICAL PROCEDURES WITH 1 TO 3 DAYS LENGTH OF STAY

WILLIAM BEAUMONT ARMY MEDICAL CENTER

CY 88

INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
57 1679	OTHER SPECIFIED ENDOSCOPY	99
58 1689	ENDOSCOPY NOS	4
59 1694	LAPAROSCOPY	51
60 1695	OPERATIVE ENTEROS- COPY OR OTHER AB- DOMINAL ENDOSCOPY	1
61 1697	ARTHROSCOPY	9
62 1724	EXERCISE TOLERANCE TESTS	23
63 1729	CARDIAC FUNCTION TESTS NOS	3
64 1830	PROBING OF LACRI- MAL PASSAGES	7
65 1831	PROBING OF NASO- LACRIMAL DUCT	2
66 1842	PERICARDIOCENTESIS DIAGNOSTIC	2
67 1843	BRONCHIAL ASPIR- ATION	1
68 1846	ASPIRATION OF KIDNEY OR PELVIS	2
69 1854	DIAGNOSTIC JOINT ASPIRATION	1
70 3211	MYELOGRAPHY	28
71 3251	INTRAVENOUS UROGRAPHY	68
72 3253	RETROGRADE UROGRAPHY	5
73 3257	CYSTOGRAPHY	5
74 3263	PERCUTANEOUS CHO- LANGIOGRAPHY	2

Report 2b

PAGE 6 SURGICAL PROCEDURES WITH 1 TO 3 DAYS LENGTH OF STAY  
WILLIAM BEAUMONT ARMY MEDICAL CENTER  
CY 80

INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
93 3713	ORTHOVOLTAGE RADIATION	2
94 3759	RADIOISOTCPIC TELERADIO THERAPY	1
95 3829	IMPLANTATION OR INSERTION OF RADIOIC ACTIVE SOURCES	1
96 3839	INJECTION OR INSTILLATION OF RADIOISOTOPES	2
97 3899	OTHER RADIO THERA- PEUTIC AND NUCLEAR MEDICINE PROCEDURE	4
98 5011	CRANIOTOMY	1
99 5036	SPINAL DRAINAGE	1
100 5042	SUTURE OF NERVE	3
101 5043	FREEDING ADHESIONS, DECOMPRESS NERVE	47
102 5045	NERVE TRANSPOSITION	6
103 5047	INJECTION INTO NERVE	4
104 5059	OTHER OPERATIONS ON NERVOUS SYSTEM	1
105 5061	UNILATERAL THYROID LOBECTOMY	1
106 5062	OTHER PARTIAL THYROIDECTOMY	1
107 5065	EXCISION OF THYROGLOSSAL TRACT	2
108 5098	INCISION, EYELID	2
109 5091	EXCISION OR DESTRUCTION, EYELID	3
110 5092	OPERATIONS ON CARPUS AND TARSUS	3

Report 2b

PAGE 7 SURGICAL PROCEDURES WITH 1 TO 3 DAYS LENGTH OF STAY  
WILLIAM BEAUMONT ARMY MEDICAL CENTER  
CY 90

INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
111 5094	CORRECTION OF BLEPHAROPTOSIS	2
112 5095	BLEPHARORRHAPHY	5
113 5096	OTHER REPAIR OF EYELIDS	45
114 5099	OTHER OPERATIONS ON EYELIDS	1
115 5101	EXCISION OF OCULAR MUSCLE, TENDON W RE SECTION, ADVANCEMENT	13
116 5102	ADVANCEMENT, RECES- SION OCULAR MUSCLE	26
117 5109	OTHER OPERATIONS ON OCULAR MUSCLE	1
118 5123	EXCISION, DESTRUC- TION, CORNEA LESION	1
119 5126	OTH REPAIR, CORNEA	2
120 5135	OTHER IRIDECTOMY OR IRIDECTOMY	4
121 5143	DISCUSSION OF LENS AND CAPSULOTOMY	1
122 5144	INTRAOCULAR EX- TRACTION OF LENS	33
123 5145	EXTRACAPSULAR EX- TRACTION OF LENS	1
124 5146	OTHER CATARACT EXTRACTION	1
125 5147	INSERTION OF PROSTHETIC LENS	3
126 5149	OTHER OPERATIONS ON LENS	1
127 5157	OPERATIONS ON VITREOUS	1

Report 2b

INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
128 5160	ORBITOTOMY	1
129 5181	EXCISION, DESTRUCTION OF LESION OF EXTERNAL EAR	2
130 5183	SUTURE OF EXTERNAL EAR	1
131 5184	SURGICAL CORRECTION, PROMINENT EAR	1
132 5185	RECONSTRUCTION OF EXTERNAL AUDITORY CANAL	5
133 5189	OTHER OPERATIONS ON EXTERNAL EAR	1
134 5191	STAPEDECTOMY	1
135 5194	MYRINGOPLASTY	5
136 5195	OTH TYMpanoplasty	4
137 5208	MYRINGOTOMY	17
138 5202	INCISION, MASTOID AND MIDDLE EAR	2
139 5203	MASTOIDECTOMY	4
140 5204	OTHER EXCISION OF MIDDLE EAR	1
141 5207	INCISION, DESTRUCTION OF INNER EAR	1
142 5209	OTHER OPERATIONS, MIDDLE, INNER EAR	3
143 5212	EXCISION, DESTRUCTION, LESION, NOSE	4
144 5214	SUBMUCOUS RESECTION, NASAL SEPTUM	3
145 5215	TURBINECTOMY	1
146 5217	REPAIR AND PLASTIC	29

## Report 2b

PAGE 9 SURGICAL PROCEDURES WITH 1 TO 3 DAYS LENGTH OF STAY  
WILLIAM BEAUMONT ARMY MEDICAL CENTER  
CY 60 PROGRAM ID 5349

INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
147 5219	OTHER OPERATIONS ON NOSE	1
148 5222	EXTERNAL MAXILLARY ANTROTOMY	2
149 5223	FRONTAL SINUSOTOMY AND SINUSECTOMY	1
150 5226	NASAL SINUS REPAIR	1
151 5229	OTHER OPERATIONS ON NASAL SINUSES	1
152 5230	FORCEPS EXTRACTION OF TOOTH	4
153 5231	SURGICAL REMOVAL OF TOOTH	15
154 5236	PROSTHETIC DENTAL IMPLANT	1
155 5240	INCISION OF GUM OR ALVEOLAR BONE	1
156 5243	EXCISION OF DENTAL LESION OF JAW	2
157 5244	ALVEOLOPLASTY	2
158 5246	APPLICATION, CRTHO- DONTIC APPLIANCE	6
159 5258	FRENOTOMY, LINGUAL	1
160 5270	DRAINAGE OF FACE OR FLOOR OF MOUTH	4
161 5272	EXCISION OF PALATE	1
162 5274	PLASTIC REPAIR OF MOUTH	2
163 5279	OTHER OPERATIONS ON MOUTH AND FACE	1
164 5280	ORAL DRAINAGE OF PHARYNGEAL ABSCESS	4



Report 2b

PAGE 10 SURGICAL PROCEDURES WITH 1 TO 3 DAYS LENGTH OF STAY  
WILLIAM BEAUMONT ARMY MEDICAL CENTER  
CY 80

INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
165 5281	TONSILLECTOMY	11
166 5282	TONSILLECTOMY WITH ADENOIDECTOMY	3
167 5285	ADENOIDECTOMY	4
168 5291	EXCISION, BRANCHIAL CLEFT VESTIGES	3
169 5300	EXCISION CR DE- STRUCTION LESION OF LARYNX	1
170 5311	TEMPORARY TRACHE- OSTOMY	1
171 5340	INCISION OF CHEST WALL AND PLEURA	7
172 5347	OPERATIONS ON DIA- PHRAGM	1
173 5351	OPEN HEART VALVOTOMY	1
174 5352	REPLACEMENT OF HEART VALVE	2
175 5361	BYPASS ANASTOMOSIS FOR HEART REVASCU- LARIZATION	2
176 5374	OTHER REPAIR OF HEART, PERICARDIUM	1
177 5377	IMPLANT OF CARDIAC PACEMAKER	4
178 5378	REMOVAL OR REPLACE- MENT OF IMPLANTED CARDIAC PACEMAKER	1
179 5380	INCISION OF VESSEL	5
180 5381	ENDARTERECTOMY	1
181 5384	LIGATION AND STRIP- PING OF VARICOSE VEINS	1

## Report 2b

PROGRAM IO S349

PAGE 11 SURGICAL PROCEDURES WITH 1 TO 3 DAYS LENG... JF STAY  
WILLIAM BEAUMONT ARMY MEDICAL CENTER  
CY 80

INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
182 5385	OTHER EXCISION OF VESSELS	1
183 5387	OTHER SURGICAL OC- CLUSION OF VESSELS	1
184 5392	OTHER SHUNT OR VASCULAR BYPASS	1
185 5395	OTHER REPAIR OF VESSEL	1
186 5396	EXTRACORPOREAL CARDIOPULMONARY BYPASS	2
187 5399	OTHER OPERATIONS ON VESSELS	1
188 5400	INCISION OF LYM- PHATIC STRUCTURES	2
189 5401	SIMPLE EXCISION OF LYMPHATIC STRUC- TURE	1
190 5403	RADICAL EXCISION, CERVIC LYMPH NODES	1
191 5413	SPLENECTOMY	1
192 5428	MANIPULATION WITH- IN ESOPHAGUS	4
193 5448	VASOTOMY	1
194 5445	OTHER REPAIR OF STOMACH	1
195 5452	EXCISION, DESTRUC- TION OF LESION OF LARGE INTESTINE	18
196 5478	APPECTECTOMY	16
197 5482	LOCAL EXCISION OR DESTRUCTION OF RECTUM	2
198 5486	REPAIR RECTUM	1

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INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
199 5487	INCISION OR EXCI- SION OF PERIRECTAL TISSUE	4
200 5490	INCISION OR EXCISION OF PERIANAL TISSUE	2
201 5492	OTHER LOCAL EX- CISION OR DESTRUC- TION OF ANUS	1
202 5493	HEMORRHOIDECTOMY	2
203 5494	DIVISION OF ANAL SPHINCTER	2
204 5496	REPAIR OF ANUS	1
205 5530	REPAIR OF INGUINO- FEMORAL HERNIA	46
206 5532	BILATERAL REPAIR OF INGUINO-FEMORAL HERNIA	2
207 5534	REPAIR OF UMBILI- CAL HERNIA	7
208 5535	REPAIR OF OTHER HERNIA OF ANTERIOR ABDOMINAL WALL	2
209 5540	INCISION OF ABDOM- INAL PARIETES	1
210 5541	LAPAROTOMY	2
211 5542	EXCISION, DESTRUC- TION OF ABDOMINAL WALL AND UMBILICUS	2
212 5543	EXCISION, DESTRUC- TION PERITONEUM	1
213 5571	CYSTOTOMY	2
214 5574	OTHER EXCISION OR DESTRUCTION OF BLADDER	2

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INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
215 5579	OTHER OPERATIONS ON URINARY BLADDER	1
216 5581	URETHRAL MEATOTOMY	2
217 5584	FREEDING OF STRICTURE OF URETHRA	1
218 5585	DILATION, URETHRA	10
219 5598	URETERAL CATHETER- IZATION	2
220 5601	TRANSURETHRAL PROSTATECTOMY	1
221 5610	INCISION SCROTUM, TUNICA VAGINALIS	1
222 5611	EXCISION, HYDROCELE	3
223 5619	OTHER OPERATIONS ON SCROTUM AND TUNICA VAGINALIS	3
224 5622	UNILATERAL ORCHIECTOMY	2
225 5624	ORCHIOPEXY	5
226 5643	CIRCUMCISION	45
227 5649	OTHER OPERATIONS, MALE GENITAL ORGAN	1
228 5657	FREEDING ADHESIONS OF OVARY AND FAL- LOPIAN TUBE	2
229 5661	TOTL SALPINGECTOMY	3
230 5663	ENDOSCOPIC DESTRUC- TION OF OCCLUSION OF FALLOPIAN TUBES	102
231 5664	OTHER DESTRUCTION OF OCCLUSION OF FALLOPIAN TUBES	29
232 5667	INSUFFLATION OF FALLOPIAN TUBES	2

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INCIDENCE SURG CODE	YITLE (ICPH)	FREQUENCY
233 5671	CONIZATION, CERVIX	7
234 5672	OTHER EXCISION OR DESTRUCTION OF LESION OF CERVIX	1
235 5674	REPAIR OF INTERNAL CERVICAL OS	1
236 5681	EXCISION OR DE- STRUCTION LESION OF UTERUS	1
237 5684	VAGINAL HYSTEREC- TOMY	2
238 5690	D AND C OF UTERUS	234
239 5691	VAGINAL REMOVAL OF INTRAUTERINE FOREIGN BODY	6
240 5700	CULDOCENTESIS	8
241 5702	LOCAL EXCISION OR DESTRUCTION, VAGINA	4
242 5706	OTHER REPAIR OF VAGINA	1
243 5709	OTHER OPERATIONS ON VAGINA	1
244 5710	INCISION OF VULVA AND PERINEUM	1
245 5711	OPERATIONS ON BARTHOLINS GLAND	6
246 5712	OTH LOCAL EXCISION OR DESTRUCTION OF VULVA, PERINEUM	2
247 5720	LOW FORCEPS DELIVERY	1
248 5721	LOW FORCEPS DELI- VERY W EPISIOTOMY	4
249 5728	VAGUUM TRACTION OM	1

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INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
250 5730	ARTIFICIAL RUPTURE OF MEMBRANES	9
251 5738	EPISIOTOMY	8
252 5750	AMNIOTIC INJECTION FOR TERMINATION OF PREGNANCY	5
253 5751	VACUUM ASPIRATION FOR TERMINATION OF PREGNANCY	2
254 5752	OTHER TERMINATION OF PREGNANCY	12
255 5753	AMNIOCENTESIS	21
256 5757	REPAIR OBSTETRIC LACERATION UTERUS	1
257 5750	REPAIR OTHER OB- STETRIC LACERATION	10
258 5761	OPEN REDUCTION OF ZYGOMATIC FRACTURE	1
259 5762	CLOSED REDUCTION MAXILLARY, MANDIB- ULAR FRACTURE	3
260 5771	EXCISION OR DESTRUCTION OF FACIAL BONE LESION	1
261 5772	PARTIAL OSTECTOMY OF FACIAL BONE EXCEPT MANDIBLE	2
262 5775	OTHER FACIAL BONE REPAIR, OSTEOPLASTY	1
263 5779	OTHER OPERATIONS ON FACIAL BONES AND JOINTS	1
264 5781	DIVISION OF BONE	8
265 5782	OSTECTOMY FOR MALLUX VALGUS	9

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INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
266 5783	EXCISION OF BONE LESION	6
267 5784	PARTIAL OSTECTOMY	5
268 5785	TOTAL OSTECTOMY	1
269 5788	REMOVAL INTERNAL FIXATION APPLIANCE	15
270 5790	CLOSED REDUCTION, FRACTURE WITH INTERNAL FIXATION	4
271 5791	OPEN REDUCTION OF FRACTURE	2
272 5792	OPEN REDUCTION OF FRACTURE WITH IN- TERNAL FIXATION	6
273 5795	TOILET OF OPEN FRACTURE SITE	8
274 5796	OPEN REDUCTION OF DISLOCATION JOINT	2
275 5800	ARTHROTOMY	5
276 5801	DIVISION OF JOINT CAPSULE, LIGAMENT OR CARTILAGE	3
277 5802	EXCISION OR CE- STRUCTION LESION OF JOINT	3
278 5804	EXCISION SEMILUNAR CARTILAGE OF KNEE	3
279 5899	OTHER EXCISION OF JOINT STRUCTURE	1
280 5810	SPINAL FUSION	1
281 5811	ARTHRODESIS FOOT AND ANKLE	2
282 5812	ARTHRODESIS OF OTHER JOINTS	3

INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
263 5813	ARTHROPLASTY OF FOOT AND TOE	7
264 5818	ARTHROPLASTY OF SHOULDER	1
265 5819	OTHER REPAIR OF JOINT STRUCTURE	1
266 5820	INCISION OF MUSCLE TENDON, FASCIA AND BURSA OF HAND	5
267 5821	DIVISION OF MUSCLE TENDON AND FASCIA OF HAND	14
268 5822	EXCISION OF LESION OF MUSCLE, TENDON AND FASCIA OF HAND	15
269 5824	SUTURE OF MUSCLE, TENDON, FASCIA, HAND	4
290 5828	OTHER PLASTIC OPERATIONS ON HAND	3
291 5829	OTHER OPERATIONS ON MUSCLE, TENDON AND FASCIA OF HAND	1
292 5830	INCISION OF MUSCLE TENDON, FASCIA AND BURSA	5
293 5831	DIVISION OF MUSCLE TENDON AND FASCIA	1
294 5832	EXCISION OF LESION OF MUSCLE, TENDON, FASCIA AND BURSA	1
295 5833	OTHER EXCISION OF MUSCLE, TENDON, AND FASCIA	2
296 5835	SUTURE OF MUSCLE, TENDON AND FASCIA	5
297 5837	OTHER PLASTIC OPER ATIONS ON MUSCLE,	6



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INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
298 5839	OTHER OPERATIONS ON MUSCLE, TENDON, FASCIA AND BURSA	1
299 5840	AMPUTATION AND DISARTICULATION OF FINGERS	3
300 5845	AMPUTATION AND DISARTICULATION OF TOES	2
301 5850	REVISION OF AMPUTATION STUMP	5
302 5860	LOCAL EXCISION OF LESION OF BREAST	4
303 5869	OTHER EXCISION OF BREAST	1
304 5871	MASTECTOMY	5
305 5873	AUGMENTATION MAMMOPLASTY	13
306 5874	REDUCTION MAMMOPLASTY	3
307 5875	OTHER REPAIR AND PLASTIC OPERATION ON BREAST	3
310 5879	OTHER OPERATIONS ON BREAST	1
309 5881	INCISION OF PILO- RIDAL SINUS	3
310 5882	OTHER INCISION OF SKIN AND SUBCU- TANEOUS TISSUE	27
311 5883	SURGICAL TOILET OF WOUND OR INFECTED TISSUE	17
312 5884	LOCAL EXCISION OF STRICTION, SKIN, SUB- CUTANEOUS TISSUE	37

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INCIDENCE SURC CODE	TITLE (ICPM)	FREQUENCY
313 5885	RADICAL EXCISION OF SKIN LESION	1
314 5887	EXCISION OF PILO- NIDAL SINUS	3
315 5890	SUTURE OF SKIN AND SUBCUTANEOUS TISSUE	21
316 5891	RELAXATION OF SCAR OR CONTRACTURE OF SKIN	4
317 5892	FREE SKIN GRAFT TO HAND	1
318 5893	OTHER FREE SKIN GRAFTS	5
319 5894	CUTTING AND PREPA- RATION OF FLAP OR PEDICLE GRAFT	3
320 5895	ATTACHMENT TO HAND OF FLAP OR PEDICLE GRAFT	1
321 5896	PLASTIC OPERATIONS LIP AND EXTERNAL MOUTH	7
322 5900	FACIAL RHYTI- DECTOMY	2
323 5901	SIZE REDUCTION PLASTIC OPERATIONS	1
324 5912	PERINEAL CAUTERIZA- TION	1
325 5950	TOPICAL APPLICA- TION OF CAUSTIC	1
326 5954	CHEMOPEEL	4
327 5969	OTHER CYTOTOXIC DRUG THERAPY	30
328 5995	OPERATION NOT COMPLETED	5

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INCIDENCE SURC CODE	TITLE (ICPM)	FREQUENCY
329 8103	REMOVAL OF OBJECT BY AUROSCOPY AND FROM MEATUS	1
330 8104	REMOVAL OF OBJECT BY RHINOSCOPY	1
331 8105	REMOVAL OF BODY BY LARYNGOSCOPY	1
332 8107	REMOVAL OF OBJECT BY BRONCHOSCOPY	1
333 8111	REMOVAL OF OBJECT BY PHARYNGOSCOPY AND ESOPHAGOSCOPY	3
334 8115	REMOVAL OF OBJECT FROM VAGINA	2
335 8116	REMOVAL OF OBJECT FROM SPECIFIED DERMAL SITE	3
336 8119	OTHER REMOVAL OF FOREIGN BODY	3
337 8123	GASTRIC IRRIGATION	1
338 8132	IRRIGATION BLADDER	1
339 8150	ASPIRATION MYGROMA CYST OR ABSCESS	1
340 8153	ASPIRATION OF PERICARDIAL SAC	1
341 8154	ASPIRATION OF BONE MARROW	2
342 8155	ASPIRATION OF PLEURAL CAVITY	3
343 8157	ASPIRATION OF PERITONEAL CAVITY	14
344 8160	ASPIRATION KIDNEY	3
345 8166	ASPIRATION JOINT	2

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INCIDENCE  
SURG CODE

TITLE (ICPM) FREQUENCY

346	6169	OTHER ASPIRATION OF FLUID	1
347	6179	OTHER STRINGING OR IRRIGATION	1
348	6182	DERMABRASION	1
349	6185	OTHER REMOVAL OF SKIN BLEMISHES	2
350	6186	REMOVAL OF NAIL	0
351	6190	WOUND CLEANING NOS	2
352	6206	CLOSED REDUCTION OF FRACTURE OF NASAL BONE	3
353	6202	CLOSED REDUCTION, FX UPPER ARM	0
354	6203	CLOSED REDUCTION, FX FOREARM, HAND	57
355	6205	CLOSED REDUCTION, FX LOWER LEG, FOOT	13
356	6209	CLOSED REDUCTION, DISLOCATION, JOINT	6
357	6225	DILATION OF BOWEL OR ARTIFICIAL ANUS	4
358	6250	ANTEMATAL MANIPU- LATION NOS	1
359	6310	APPLICATION OF CAST	65
360	6319	CAST OR PLASTER IMMOBILIZATION	27
361	6324	SPLINTING FOR FRACTURE	0
362	6329	OTHER SPLINTING FOR IMMOBILIZATION	2
363	6334	WIRING OF TEETH	1

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INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
364 8389	REMOVAL OF OTHER FIXATION	1
365 8400	INFIXED BONE PIN	1
366 8412	OTHER CERVICAL TRACTION	1
367 8430	BALANCED SUSPENSION	9
368 8450	CERVICAL COLLAR FOR HEAD TRACTION	1
369 8460	REMOVAL OF INFIXED BONE PIN	1
370 8472	TRACTION FOR CLOSED FRACTURE	1
371 8474	TRACTION FOR DISLOCATION	2
372 8479	TRACTION OTHER AND UNQUALIFIED	3
373 8564	FITTING OF ARTI- FICIAL LIMB	1
374 8570	INJECTION INTO SPINAL CANAL	3
375 8590	INJECTION INTO KIDNEY	1
376 8587	INJECTION INTO OTHER SPECIFIED TISSUE	1
377 8620	PHOTOTHERAPY	14
378 8640	EXTERNAL ELECTRODE STIMULATION	13
379 8651	EMERGENCY PACE- MAKER	5
380 8709	TRACHEAL INTUBA- TION NOS	3
381 8710	MECHANICAL	1

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INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
382 8803	REPLACEMENT TRANSFUSION	1
383 8813	DRIED PLASMA INJECTION	1
384 8830	ARTERIAL CATHETER- IZATION OR CANNU- LATION	1
385 8833	CATHETERIZATION OF UMBILICAL VESSEL	1
386 8835	CUT-DOWN VENOUS CATHETERIZATION OR CANNULATION	4
387 8851	OPERATIVE EXTERNAL CIRCULATION	1
388 8853	HEMODIALYSIS	11
389 8897	REMOVAL OF SUTURE OR CLIPS FROM SKIN WOUND	2
390 8961	MONITORING FETAL HEART DURING LABOR	13
391 8990	CLINICAL MONITORING	1
392 9251	INDUCTION BY INTRA VENOUS INJECTION OR DRIP	2
	TOTAL	2772

\*\* See Notes at End of Report \*\*

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INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
1 1272	CENTRAL VENOUS PRESSURE MEASURE	11
2 1273	INTRAVENOUS CATHE- TERIZATION, HEART	24
3 1275	RETROGRADE CATHE- TERIZATION OF LEFT HEART	24
4 1278	OTHER CATHETER- IZATION OF HEART	1
5 1334	OTHER CYSTOMETRY	1
6 1363	ELECTROHYGROGRAPHY	3
7 1420	BIOPSY OF LARYNX BY LARYNGOSCOPY	5
8 1422	TONSILS, FAUCES AND ADENOIDS BICFSY	1
9 1425	BONE MARROW BIOPSY	4
10 1426	LYMPHATIC BIOPSY	6
11 1431	LUNG PERCUTANEOUS BIOPSY	1
12 1432	BIOPSY OF BRONCHUS BY ENDOSCOPY	1
13 1433	PLEURAL BIOPSY	1
14 1434	BIOPSY OF CHEST	1
15 1440	BIOPSY ESOPHAGUS BY ENDOSCOPY	2
16 1441	BIOPSY OF STOMACH BY ENDOSCOPY	1
17 1442	DUODENAL CAPSULE BIOPSY	1
18 1450	BIOPSY OF COLON BY ENDOSCOPY	10
19 1451	BIOPSY OF SIGMOID COLON BY ENDOSCOPY	1

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INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
20 1452	BIOPSY OF RECTUM BY ENDOSCOPY	3
21 1454	LIVER PERCUTANEOUS BIOPSY	0
22 1460	PERCUTANEOUS BIOPSY OF KIDNEY	5
23 1463	BIOPSY OF PROSTATE	17
24 1471	ENDOMETRIAL BIOPSY	4
25 1473	ENDOCERVICAL BIOPSY	1
26 1475	OTHER, UNSPECIFIED CERVICAL BIOPSY	36
27 1477	BIOPSY INTROITUS	1
28 1482	BREAST BIOPSY	1
29 1484	BCNE OR JOINT BIOPSY	1
30 1500	SURGICAL BIOPSY OF SKIN, SUBCUTANEOUS TISSUE	2
31 1501	SURGICAL BIOPSY OF BREAST	4
32 1502	SURGICAL BIOPSY OF MUSCLE	2
33 1530	SURGICAL BIOPSY OF NOSE, OTHER PARTS	1
34 1540	SURGICAL BIOPSY, LIP	1
35 1540	SURGICAL BIOPSY OF NASOPHARYNX	1
36 1551	SURGICAL BIOPSY OF LIVER	1
37 1557	SURGICAL BIOPSY OF RECTUM	1
38 1562	SURGICAL BIOPSY OF OTH. PRIMARY ORGANS	1



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INCIDENCE  
 SURG CODE

TITLE (ICPM) FREQUENCY

39 1563 SURGICAL BIOPSY OF 1  
 PROSTATE

40 1565 SURGICAL BIOPSY OF 3  
 TESTIS

41 1571 SURGICAL BIOPSY OF 1  
 CERVIX

42 1573 SURGICAL BIOPSY OF 1  
 VULVA

43 1581 SURGICAL BIOPSY OF 1  
 OTHER MEDASTINAL,  
 THORACIC ORGAN

44 1586 SURGICAL BIOPSY OF 3  
 SUPERFICIAL LYMPH  
 NODE

45 1599 SURGICAL BIOPSY NOS 1

46 1610 DIAGNOSTIC LARYNGO 1  
 SCOPIC PROCEDURES

47 1612 DIRECT LARYNGOS- 4  
 COPY

48 1630 ESOPHAGOSCOPY 6

49 1633 GASTROSCOPY 5

50 1641 COLONOSCOPY 27

51 1642 SIGMOIDOSCOPY 2

52 1643 PROCTOSCOPY 11

53 1652 CYSTOSCOPY 21

54 1653 PANENDOSCOPY 1

55 1655 URETHROSCOPY 2

56 1663 COLPOSCOPY 9

57 1679 OTHER SPECIFIED 26  
 ENDOSCOPY

58 1689 ENDOSCOPY NOS 6

PAGE 4 SURGICAL PROCEDURES WITH 1 TO 3 DAYS LENGTH OF STAY  
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INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
59 1690	BRONCHOSCOPY, TRA- CHEOSCOPY BY MEANS OF TRACHEOTOMY	1
60 1694	LAPAROSCOPY	57
61 1695	OPERATIVE ENTEROS- COPY OR OTHER AB- DOMINAL ENDOSCOPY	2
62 1697	ARTHROSCOPY	1
63 1710	MEASUREMENT OF LUNG VOLUMES	1
64 1724	EXERCISE TOLERANCE TESTS	1
65 1830	PROBING OF LACRI- MAL PASSAGES	10
66 1831	PROBING OF NASO- LACRIMAL DUCT	21
67 1854	DIAGNOSTIC JOINT ASPIRATION	3
68 1859	OTHER AND UNSPECI- FIED ASPIRATION	3
69 1860	DIAGNOSTIC CATHE- TERIZATION OF VEIN OF ORGAN	1
70 3211	MYELOGRAPHY	25
71 3251	INFRAVENOUS UROGRAPHY	35
72 3253	RETROGRADE UROGRAPHY	25
73 3257	CYSTOGRAPHY	16
74 3262	OPERATIVE CHOLAN- GIOGRAPHY	4
75 3273	HYSTEOSALPINGOG- RAPHY	5

\* \* See Notes at End of Report \* \*

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INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
76 3297	ARTHOGRAPHY	3
77 3309	ARTERIOGRAPHY OF HEAD AND NECK	29
78 3312	ARTERIOGRAPHY, CORONARY	12
79 3318	ANGIOCARDIOGRAPHY	12
80 3335	ARTERIOGRAPHY, RENAL	10
81 3338	ACUTOGRAPHY	20
82 3339	OTHER ARTERIOG- RAPHY OF TRUNK	3
83 3349	ARTERIOGRAPHY OF EXTREMITIES	13
84 3379	VENOGRAPHY	6
85 3389	LYMPHANGIOGRAPHY AND LYMPHADENOG- RAPHY	2
86 3429	TOMOGRAPHY	15
87 3440	COMPUTERIZED AXIAL TOMOGRAPHY OF HEAD	64
88 3448	OTHER COMPUTERIZED AXIAL TOMOGRAPHY	8
89 3519	RADIOISOTOPE SCAN, FUNCTION STUDY	43
90 3599	OTHER NUCLEAR DIAG- NOSTIC PROCEDURES	2
91 3619	DIAGNOSTIC ULTRA- SOUND	46
92 3699	OTHER DIAGNOSTIC RADIOLOGICAL PROCEDURES	10
93 3713	ORTHOVOLTAGE RADIATION	5

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INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
94 3039	INJECTION OR INSTILLATION OF RADIOISOTOPES	1
95 3099	OTHER RADIOOTHERA- PEUTIC AND NUCLEAR MEDICINE PROCEDURE	1
96 5022	VENTRICULOSTOMY	1
97 5024	REVISION OF VENTRICULAR SHUNT	4
98 5041	OTHER DESTRUCTION OF NERVE	1
99 5042	SUTURE OF NERVE	10
100 5043	FREEDING ADHESIONS, DECOMPRESS NERVE	14
101 5047	INJECTION INTO NERVE	3
102 5052	INJECTION INTO SYMPATHETIC NERVE OR GANGLION	1
103 5062	OTHER PARTIAL THYROIDECTOMY	1
104 5066	EXCISION OF THYROGLOSSAL TRACT	4
105 5086	REPAIR CANALICULUS AND PUNCTUM	1
106 5088	CONJUNCTIVO- RHINOSTOMY	1
107 5089	OTHER OPERATIONS, LACRIMAL APPARATUS	1
108 5092	OPERATIONS ON CANTHUS AND TARSUS	2
109 5094	CORRECTION OF BLEPHAROPTOSIS	2
110 5095	BLEPHARORRHAPHY	2

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INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
111 5096	OTHER REPAIR OF EYELIDS	32
112 5101	EXCISION OF OCULAR MUSCLE, TENDON H RE CESSION, ADVANCEMENT	13
113 5102	ADVANCEMENT, RECES- SION OCULAR MUSCLE	43
114 5104	OTHER SHORTENING OF OCULAR MUSCLE	1
115 5109	OTHER OPERATIONS ON OCULAR MUSCLE	1
116 5129	OTHER OPERATIONS ON CORNEA	1
117 5137	SCLEROPLASTY	1
118 5139	OTHER OPERATIONS, IRIS, CILIARY BODY, ANTERIOR CHAMBER	1
119 5144	INTRACAPSULAR EX- TRACTION OF LENS	12
120 5145	EXTRACAPSULAR EX- TRACTION OF LENS	4
121 5146	OTHER CATARACT EXTRACTION	3
122 5147	INSERTION OF PROSTHETIC LENS	6
123 5154	OTHER OPERATIONS, REPAIR OF RETINA	1
124 5168	ORBITOTOMY	1
125 5164	EXCISION OR DESTRUCTION OF ORBITAL CONTENTS	1
126 5166	REMOVAL OF ORBITAL IMPLANT	2
127 5167	REPAIR OF ORBIT	1

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INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
128 5169	OTHER OPERATIONS ON ORBIT AND EYE	1
129 5180	INCISION OF EXTERNAL EAR	1
130 5185	EXCISION, DESTRUC- TION OF LESION OF EXTERNAL EAR	2
131 5184	SURGICAL CORREC- TION, PROMINENT EAR	1
132 5185	RECONSTRUCTION OF EXTERNAL AUDITORY CANAL	1
133 5131	STAPEDECTOMY	3
134 5133	OTHER OPERATIONS ON OSSICULAR CHAIN	4
135 5194	MYRINGOPLASTY	10
136 5195	OTA TYMPANOPLASTY	4
137 5196	REVISION OF TYMPANOPLASTY	2
138 5200	MYRINGOTOMY	27
139 5202	INCISION, MASTOID AND MIDDLE EAR	3
140 5203	MASTOIDECTOMY	4
141 5204	OTHER EXCISION OF MIDDLE EAR	1
142 5209	OTHER OPERATIONS, MIDDLE, INNER EAR	8
143 5211	INCISION OF NOSE	2
144 5212	EXCISION, DESTRUC- TION, LESION, NOSE	7
145 5214	SUBMUCOUS RESEC- TION, NASAL SEPTUM	13

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INCIDENCE SURG CODE	E (ICPH)	FREQUENCY
146 5216	OPEN REDUCTION OF FRACTURE OF NASAL BONE	1
147 5217	REPAIR AND PLASTIC OPERATIONS ON NOSE	20
148 5219	OTHER OPERATIONS ON NOSE	1
149 5222	EXTERNAL MAXILLARY ANOTOMY	2
150 5223	FRONTAL SINUSITOMY AND SINUSECTOMY	1
151 5225	OTHER NASAL SINUSECTOMY	4
152 5230	FORCEPS EXTRACTION OF TOOTH	2
153 5231	SURGICAL REMOVAL OF TOOTH	40
154 5232	RESTORATION, TOOTH BY FILLING	3
155 5237	APICECTOMY AND ROOT CANAL THERAPY	1
156 5242	OTHER OPERATIONS ON GUM	2
157 5243	EXCISION OF DENTAL LESION OF JAW	4
158 5244	ALVEOLOPLASTY	6
159 5246	APPLICATION, ORTHO- DONTIC APPLIANCE	6
160 5249	OTHER DENTAL OPERATION	1
161 5259	OTHER OPERATIONS ON TONGUE	1
162 5261	EXCISION OF LESION OF SALIVARY GLAND	2

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INCIDENCE SURC CODE	TITLE (ICPH)	FREQUENCY
163 5262	OTHER EXCISION OF SALIVARY GLAND	1
164 5270	DRAINAGE OF FACE OR FLOOR OF MOUTH	4
165 5274	PLASTIC REPAIR OF MOUTH	3
166 5280	ORAL DRAINAGE OF PHARYNGEAL ABSCESS	6
167 5281	TONSILLECTOMY	15
168 5282	TONSILLECTOMY WITH ADENOIDECTOMY	6
169 5285	ADENOIDECTOMY	3
170 5300	EXCISION OR DESTRUCTION LESION OF LARYNX	2
171 5321	OTHER EXCISION OF BRONCHUS	2
172 5340	INCISION OF CHEST WALL AND PLEURA	4
173 5346	REPAIR CHEST WALL	1
174 5349	OTHER OPERATIONS ON THORAX	1
175 5378	PERICARDIOTOMY	1
176 5377	IMPLANT OF CARDIAC PACEMAKER	3
177 5380	INCISION OF VESSEL	1
178 5387	OTHER SURGICAL OCCLUSION OF VESSELS	3
179 5390	SYSTEMIC PULMONARY ARTERIAL SHUNT	1
180 5393	SUTURE OF VESSEL	3
181 5394	REVISION OF VASCULAR PROCEDURE	2



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INCIDENCE SURC CODE	TITLE (ICPM)	FREQUENCY
102 5395	OTHER REPAIR OF VESSEL	6
103 5401	SIMPLE EXCISION OF LYMPHATIC STRUCTURE	4
104 5413	SPLENECTOMY	2
105 5420	MANIPULATION WITH- IN ESOPHAGUS	2
106 5445	OTHER REPAIR OF STOMACH	1
107 5452	EXCISION, DESTRUCTION OF LESION OF LARGE INTESTINE	5
108 5467	OTHER REPAIR OF INTESTINE	1
109 5470	APPENDECTOMY	54
190 5480	PROCTOTOMY	1
191 5482	LOCAL EXCISION OR DESTRUCTION OF RECTUM	1
192 5486	REPAIR RECTUM	1
193 5487	INCISION OR EXCISION OF PERIRECTAL TISSUE	7
194 5490	INCISION OR EXCISION OF PERIANAL TISSUE	1
195 5491	INCISION OR EXCISION OF ANAL FISTULA	5
196 5492	OTHER LOCAL EXCISION OR DESTRUCTION OF ANUS	2
197 5494	DIVISION OF ANAL SPHINCTER	3

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INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
198 5581	LOCAL EXCISION OR DESTRUCTION OF LIVER	1
199 5511	CHOLECYSTECTOMY	2
200 5530	REPAIR OF INGUINO- FEMORAL HERNIA	50
201 5532	BILATERAL REPAIR OF INGUINO-FEMORAL HERNIA	1
202 5534	REPAIR OF UMBILI- CAL HERNIA	8
203 5535	REPAIR OF OTHER HERNIA OF ANTERIOR ABDOMINAL WALL	2
204 5548	INCISION OF ABDOM- INAL PARIETES	1
205 5541	LAPAROTOMY	7
206 5542	EXCISION, DESTRUC- TION OF ABDOMINAL WALL AND UMBILICUS	7
207 5561	URETERAL NEATOTOMY	1
208 5562	URETEROTOMY	1
209 5581	URETHRAL NEATOTOMY	2
210 5582	EXCISION OR DE- STRUCTION URETHRA	1
211 5583	REPAIR OF URETHRA	2
212 5585	DILATION, URETHRA	10
213 5589	OTHER OPERATIONS ON URETHRA	2
214 5618	INCISION SCROTUM, TUNICA VAGINALIS	3
215 5611	EXCISION, HYDROCELE	8

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INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
216 5620	INCISION OF TESTIS	1
217 5621	EXCISION, DESTRUCTION TESTIS LESION	1
218 5622	UNILATERAL ORCHIECTOMY	2
219 5623	BILATERAL ORCHIECTOMY	3
220 5624	ORCHIOPEXY	10
221 5629	OTHER OPERATIONS ON TESTIS	1
222 5630	EXCISION OF VARICOCELE AND HYDROCELE OF SPERMATIC CORD	8
223 5637	REPAIR EPIDIDYMISS AND VAS DEFERENS	2
224 5640	CIRCUMCISION	14
225 5649	OTHER OPERATIONS, MALE GENITAL ORGAN	3
226 5651	LOCAL EXCISION OR DESTRUCTION OVARY	2
227 5653	UNILATERAL SALPINGO OOPHORECTOMY	2
228 5656	REPAIR OF OVARY	1
229 5661	TOTAL SALPINGECTOMY	1
230 5663	ENDOSCOPIC DESTRUCTION OF OCCLUSION OF FALLOPIAN TUBES	125
231 5664	OTHER DESTRUCTION OF OCCLUSION OF FALLOPIAN TUBES	23
232 5667	INSUFFFLATION OF FALLOPIAN TUBES	1
233 5671	CONIZATION, CERVIX	4

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INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
234 5672	OTHER EXCISION OR DESTRUCTION OF LESION OF CERVIX	4
235 5674	REPAIR OF INTERNAL CERVICAL OS	1
236 5681	EXCISION OR DE- STRUCTION LESION OF UTERUS	1
237 5690	D AND C OF UTERUS	207
238 5691	VAGINAL REMOVAL OF INTRAUTERINE FOREIGN BODY	11
239 5699	OTHER OPERATIONS, UTERUS, CERVIX AND SUPPORT STRUCTURE	1
240 5700	CULDOCENTESIS	3
241 5762	LOCAL EXCISION OR DESTRUCTION, VAGINA	1
242 5709	OTHER OPERATIONS ON VAGINA	1
243 5711	OPERATIONS ON BARTHOLINS GLAND	6
244 5712	OTH LOCAL EXCISION OR DESTRUCTION OF VULVA, PERINEUM	2
245 5716	REPAIR OF VULVA AND PERINEUM	4
246 5721	LOW FORCEPS DELI- VERY W EPISIOTOMY	1
247 5730	ARTIFICIAL RUPTURE OF MEMBRANES	2
248 5738	EPISIOTOMY	3
249 5751	VACUUM ASPIRATION FOR TERMINATION OF PREGNANCY	1

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INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
250 5753	AMNIOCENTESIS	24
251 5756	REMOVAL OF RETAINED PLACENTA	1
252 5757	REPAIR OBSTETRIC LACERATION UTERUS	1
253 5758	REPAIR OTHER OB- STETRIC LACERATION	6
254 5762	CLOSED REDUCTION MAXILLARY, MANDIB- ULAR FRACTURE	10
255 5767	OTHER OPEN REDUC- TION OF FACIAL FX	1
256 5770	INCISION OF FACIAL BONES	1
257 5772	PARTIAL OSTECTOMY OF FACIAL BONE EXCEPT MANDIBLE	1
258 5773	EXCISION AND RECONSTRUCTION OF MANDIBLE	2
259 5775	OTHER FACIAL BONE REPAIR, OSTEOPLASTY	2
260 5779	OTHER OPERATIONS ON FACIAL BONES AND JOINTS	1
261 5760	INCISION OF BONE	1
262 5761	DIVISION OF BONE	1
263 5762	OSTECTOMY FOR HALLUX VALGUS	4
264 5763	EXCISION OF BONE LESION	2
265 5764	PARTIAL OSTECTOMY	2
266 5766	BONE GRAFT	2

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INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
267 5786	REMOVAL INTERNAL FIXATION APPLIANCE	16
268 5789	OTHER OPERATIONS ON BONE	1
269 5792	OPEN REDUCTION OF FRACTURE WITH IN- TERNAL FIXATION	14
270 5795	TOILET OF OPEN FRACTURE SITE	5
271 5797	OPERATIONS FOR MUL TIPLE FRACTURES AND INJURIES NEC	1
272 5800	ARTHROTOMY	3
273 5801	DIVISION OF JOINT CAPSULE, LIGAMENT OR CARTILAGE	7
274 5802	EXCISION OR DE- STRUCTION LESION OF JOINT	3
275 5804	EXCISION SEMILUNAR CARTILAGE OF KNEE	1
276 5809	OTHER EXCISION OF JOINT STRUCTURE	1
277 5811	ARTHRODESIS FOOT AND ANKLE	3
278 5812	ARTHRODESIS OF OTHER JOINTS	2
279 5813	ARTHROPLASTY OF FOOT AND TOE	4
280 5814	ARTHROPLASTY, KNEE	1
281 5817	ARTHROPLASTY OF HAND AND FINGER	1
282 5818	ARTHROPLASTY OF SHOULDER	2

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INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
283 5813	OTHER REPAIR OF JOINT STRUCTURE	2
284 5820	INCISION OF MUSCLE TENDON, FASCIA AND BURSA OF HAND	2
285 5821	DIVISION OF MUSCLE TENDON AND FASCIA OF HAND	13
286 5822	EXCISION OF LESION OF MUSCLE, TENDON AND FASCIA OF HAND	7
287 5824	SUTURE OF MUSCLE, TENDON, FASCIA, HAND	6
288 5827	PLASTIC OPERATION ON HAND WITH GRAFT OR IMPLANT	1
289 5828	OTHER PLASTIC OPERATIONS ON HAND	2
290 5829	OTHER OPERATIONS ON MUSCLE, TENDON AND FASCIA OF HAND	2
291 5830	INCISION OF MUSCLE TENDON, FASCIA AND BURSA	3
292 5831	DIVISION OF MUSCLE TENDON AND FASCIA	4
293 5832	EXCISION OF LESION OF MUSCLE, TENDON, FASCIA AND BURSA	2
294 5833	OTHER EXCISION OF MUSCLE, TENDON, AND FASCIA	2
295 5835	SUTURE OF MUSCLE, TENDON AND FASCIA	7
296 5836	RECONSTRUCTION OF MUSCLE AND TENDON	2

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INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
297 5837	OTHER PLASTIC OPERATIONS ON MUSCLE, TENDON AND FASCIA	11
298 5848	AMPUTATION THIGH, DISARTICULATION AT KNEE	1
299 5849	ABDOMINOPELVIC AMPUTATION AND DISARTICULATION HIP	1
300 5851	REATTACHMENT OF FINGERS AND THUMB	1
301 5859	OTHER OPERATIONS, MUSCULOSKELETAL, MULTIPLE SYSTEM	1
302 5860	LOCAL EXCISION OF LESION OF BREAST	2
303 5871	MASTECTOMY	8
304 5872	BREAST NIPPLE OPERATION	2
305 5873	AUGMENTATION MAMMOPLASTY	21
306 5874	REDUCTION MAMMOPLASTY	6
307 5875	OTHER REPAIR AND PLASTIC OPERATION ON BREAST	14
308 5879	OTHER OPERATIONS ON BREAST	1
309 5881	INCISION OF PILO-NIDAL SINUS	3
310 5882	OTHER INCISION OF SKIN AND SUBCUTANEOUS TISSUE	23
311 5883	SURGICAL TOILET OF WOUND OR INFECTED TISSUE	29



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INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
312 5884	LOCAL EXCISION, DESTRUCTION, SKIN, SUBCUTANEOUS TISSUE	29
313 5885	RADICAL EXCISION OF SKIN LESION	1
314 5890	SUTURE OF SKIN AND SUBCUTANEOUS TISSUE	22
315 5891	RELAXATION OF SCAR OR CONTRACTURE OF SKIN	7
316 5892	FREE SKIN GRAFT TO HAND	2
317 5893	OTHER FREE SKIN GRAFTS	1
318 5894	CUTTING AND PREPARATION OF FLAP OR PEDICLE GRAFT	2
319 5895	ATTACHMENT TO HAND OF FLAP OR PEDICLE GRAFT	1
320 5900	FACIAL RHYTHIDECTOMY	5
321 5909	OTHER OPERATIONS	1
322 5912	PERINEAL CAUTERIZATION	1
323 5969	OTHER CYTOTOXIC DRUG THERAPY	30
324 5970	INTRAVENOUS SCLEROSING INJECTION	1
325 5982	OTHER SURGICAL OPERATIONS FOR PREVENTIVE PURPOSE	2
326 5995	OPERATION NOT COMPLETED	17
327 6103	REMOVAL OF OBJECT	1

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INCIDENCE SURG CODE	YILL (ICPM)	FREQUENCY
328 8107	REMOVAL OF OBJECT BY BRONCHOSCOPY	1
329 8110	REMOVAL OF OBJECT FROM MOUTH AND NASOPHARYNX	1
330 8111	REMOVAL OF OBJECT BY PHARYNGOSCOPY AND ESOPHAGOSCOPY	6
331 8119	OTHER REMOVAL OF FOREIGN BODY	2
332 8123	GASTRIC IRRIGATION	4
333 8141	LACRIMAL DUCT CATHETERIZATION	1
334 8150	ASPIRATION HYGROMA CYST OR ABSCESS	1
335 8155	ASPIRATION OF PLEURAL CAVITY	4
336 8157	ASPIRATION OF PERITONEAL CAVITY	6
337 8160	ASPIRATION KIDNEY	1
338 8166	ASPIRATION, JOINT	3
339 8167	ASPIRATION, OTHER MUSCULOSKELETAL STRUCTURES	1
340 8167	LIGATION OF DERMAL PROTUBERANCE	1
341 8190	WOUND CLEANING NOS	1
342 8191	TOILET OF WOUND NOS	1
343 8192	DRESSING OF WOUND	1
344 8200	CLOSED REDUCTION OF FRACTURE OF NASAL BONE	2

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INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
345 8202	CLOSED REDUCTION, FX UPPER ARM	32
346 8203	CLOSED REDUCTION, FX FOREARM, HAND	43
347 8204	CLOSED REDUCTION, FX UPPER LEG	6
348 8205	CLOSED REDUCTION, FX LOWER LEG, FOOT	20
349 8208	CLOSED REDUCTION OF OTHER FRACTURE	1
350 8209	CLOSED REDUCTION, DISLOCATION, JOINT	9
351 8217	MANIPULATION UNDER ANESTHESIA	1
352 8225	DILATION OF BOWEL OR ARTIFICIAL ANUS	1
353 8310	APPLICATION OF CAST	65
354 8313	REPLACEMENT OF CAST OR JACKET	3
355 8319	CAST OR PLASTER IMMOBILIZATION	155
356 8321	SPLINTING OF FINGER	1
357 8324	SPLINTING FOR FRACTURE	4
358 8330	EXTERNAL FIXATION OF FRACTURED BONE	1
359 8332	OTHER IMMOBILIZA- TION OF BONE	2
360 8380	REMOVAL OF CAST, MOLD OR SUPPORT	2
361 8430	BALANCED SUSPENSION	11

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INCIDENCE SURG CODE	TITLE (ICPH)	FREQUENCY
362 8472	TRACTION FOR CLOSED FRACTURE	2
363 8474	TRACTION FOR DISLOCATION	1
364 8504	CONTROL OF VAGINAL HEMORRHAGE	1
365 8504	INJECTION INTO JOINT OR LIGAMENT	2
366 8585	INJECTION INTO MUSCLE, TENDON OR BURSA	1
367 8587	INJECTION INTO OTHER SPECIFIED TISSUE	1
368 8620	PHOTOTHERAPY	9
369 8640	EXTERNAL ELECTRODE STIMULATION	10
370 8651	EMERGENCY PACE- MAKER	6
371 8700	INSERTION OF ENDO TRACHEAL TUBE	2
372 8709	TRACHEAL INTUBA- TION NOS	6
373 8710	MECHANICAL VENTILATION	1
374 8805	TRANSFUSION OF PACKED BLOOD CELLS	1
375 8830	ARTERIAL CATHETER- IZATION OR CANNU- LATION	14
376 8831	FEMORAL ARTERY CANNULIZATION	1
377 8834	VENOUS CATHETERI- ZATION, CANNULATION	4

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INCIDENCE SURG CODE	TITLE (ICPM)	FREQUENCY
378 8835	CUT-DOWN VENOUS CATHETERIZATION OR CANNULATION	1
379 8853	HEMODIALYSIS	2
380 8860	PERITONEAL DIALYSIS	1
381 8881	REPLACEMENT OF SUB CUTANEOUS PULSE GENERATOR, BATTERY	2
382 8944	PLETHYSMOGRAPHIC MONITORING	1
383 8961	MONITORING FETAL HEART DURING LABOR	2

TOTAL 2727

## Footnotes:

Due to the large number of procedures involved, data are not presented on a monthly basis and no days are included.

SOURCE: Individual Patient Data System (IPDS) (MCS MED-345)

PREPARED BY:  
Department of the Army  
US Army Patient Administration Systems  
and Biostatistics Activity  
HQU-088

11 FEB 1982

**APPENDIX E**

**Proposed Procedural Guide for WBAMC  
Ambulatory Surgery Program**

11/10

## **PROPOSED PROCEDURAL GUIDE FOR WBAMC AMBULATORY SURGERY PROGRAM**

### **I. OBJECTIVES.**

The purpose of the Ambulatory Surgery Program is to provide a flexible, effective, and safe means by which patients not otherwise requiring hospitalization can receive necessary surgery on an ambulatory basis, and not remain in the hospital overnight. The primary goal of this program is to remove certain categories of surgical patients from beds in an effort to more efficiently utilize existing hospital resources and staff.

### **II. PROGRAM DESCRIPTION.**

The Ambulatory Surgery Program will be integrated into the existing facilities. A separate ambulatory surgery nursing unit (ASNU), organized under the Department of Nursing, will be established on Ward 10 East, and will provide the necessary nursing and administrative services to patients enrolled in the program. Program events are divided into three different days: Day of Referral, Day of Pre-anesthesia Interview; and Day of Surgery. Specific events and responsibilities will be discussed below. Patients will be formally admitted to the hospital, but will not remain overnight under normal circumstances.

### **III. PROGRAM ADMINISTRATION.**

A. An ambulatory surgery executive committee will provide overall direction and supervision to the program.

B. Committee members are:

1. Chief, Department of Surgery, Chairman
2. Chief, Department of Orthopaedics
3. Chief, Department of Obstetrics/Gynecology
4. Chief, Anesthesia Service
5. Head Nurse, ASNU
6. Administrator, CPS
7. Senior representatives from the following departments.  
Patient Administration Division  
Department of Radiology  
Department of Pathology

C. Committee responsibilities are:

1. Directing/supervising program.
2. Formulating/maintaining a current list of approved ambulatory surgery procedures. (Clinical chiefs only)
3. Establishing patient selection criteria.

4. Problem-solving.
5. Monitoring quality/utilization.
6. Staff education.
7. Reporting to hospital-wide Quality Assurance Program.

#### IV. SELECTION OF PATIENTS

Only ASA Class I and II patients will be considered for program enrollment. The attending physician is responsible for making patient selection. Single patients living alone or in a barracks will not normally be enrolled.

#### V. CONTINUING EDUCATION FOR ASNU EMPLOYEES

The Chief, Department of Nursing will be responsible for continuing education. Other participating departments will assist as necessary.

#### VI. MEDICAL STAFF PRIVILEGES

Medical staff privileges for ambulatory surgery remain unchanged from existing credentials. Each participating physician will receive a thorough briefing in ambulatory patient requirements and system policies/procedures.

#### VII. TASKS AND RESPONSIBILITIES

Tasks and responsibilities of those associated with WBAMC's ambulatory surgery program, listed in approximate chronological order are as follows:

##### A. DAY OF REFERRAL

1. Physician: upon determination that a patient is eligible for ambulatory surgery (ASA Class I or II patients), the following actions must be completed prior to referral.

a. Establish firm date and time for the surgical procedure.

b. Complete the following forms and give to the patient with instructions as to where each is to be taken:

(1) IAS Admission Record (HSC Form 348R), blocks 1 thru 7. Take to Admission and Disposition Office, Patient Administration Division.

(2) All required requests for pre-operative testing. To be taken to the appropriate testing area. Completed tests are to be forwarded to Ward 10 AS.

c. Complete the following forms and forward to the Ambulatory Surgery Nursing Unit (ASNU).

(1) Standard Form 539, Abbreviated Medical Record. This form can be used only for ASA Class I patients. ASA Class II patients require the same forms used for surgical inpatients.



(2) Standard Form 522, Request for Administration of Anesthesia and for Performance of Operations and Other Surgical Procedures. A brief description of the surgical procedure should be written in terms understandable to the patient. This consent form must be signed by the physician, indicating that the patient has been counseled for the specific procedures noted. The patient and one witness must also sign the operative permit.

(3) DA Form 4107, Operation Request and Worksheet. This form is used to request instruments, sutures, type of preparation required, and any special instructions. Scheduled date and time of the procedure must be entered.

(4) Standard Form 517, Pre-anesthetic Summary. Referring physician completes and signs the front side only.

2. Referring Clinic Clerk/Secretary: will insure that all necessary ambulatory surgery forms have been properly completed and assembled. Insures that the patient has received the required requests for diagnostic testing. Proper entries will be made to the clinic's projected OR schedule. A telephone call will be made to the ASNU clerk prior to the patient leaving the clinic to advise of the referral. In the event a referral is made late in the day, it may be necessary for the day of referral activities to be postponed to another day. The clinic clerk/secretary is responsible for handcarrying required forms to the ASNU clerk not later than the day following the referral.

3. PAD Admissions Clerk:

a. Complete all required pre-admission forms IAW PAD Standing Operating Procedure 3.

b. Place the pre-admission package in a manila folder and instruct the patient to handcarry the folder to the ASNU, located on Ward 10E.

c. Advise the patient that a one day per diem charge will be made (give amount for type of patient), which will automatically be billed to patient's mailing address, unless patient elects to make payment upon discharge.

d. Instruct patient to leave all valuables at home if possible.

4. Ambulatory Surgery Nursing Unit:

a. Head Nurse (or designee):

(1) Determine patient's day and time of surgery and the type of procedure to be performed.

(2) Establish pre-anesthesia interview appointment (NLT 24 hours prior to the surgery).

(3) Review pre-admission file for completeness and give to ward clerk for processing.

(4) Orient patient to the ASNU and conduct pre-operative nursing assessment and teaching; provide appropriate written instructions. (NOTE: pre-operative assessment and teaching can be performed on the day of pre-anesthesia interview, if desired.)

(5) Make preliminary nursing assessment notes.

(6) Instruct patient to report to ASNU to pick up file prior to pre-anesthesia interview.

b. Ward Clerk:

(1) Responsible for coordination of schedules with the referring clinic. Advise clinic if a proposed day of surgery cannot be accommodated by the ASNU.

(2) Responsible for picking up all pre-admission packages in the PAD at least once per day. Separate files are to be maintained on each patient, suspended to the day prior to pre-anesthesia interview.

(3) Maintain a checklist of forms received and/or required for each patient. Insure that all required forms are on hand not later than the day prior to the scheduled pre-anesthesia interview. This is critical since the anesthesiologist/nurse anesthetist must review the forms during the interview.

B. DAY OF PRE-ANESTHESIA INTERVIEW

1. Ambulatory Surgery Nursing Unit:

a. Head Nurse.

(1) Reiterate any pertinent pre-operative instructions; answer any questions.

(2) Instruct the patient as to the time he/she is to report to the ASNU on the day of surgery.

(3) Instruct patient to report to anesthesia interview area with file.

b. Ward Clerk.

(1) Provide patient his/her file after insuring completeness.

(2) Collect all patient files from the OR office at the end of the shift and re-file suspended to day of surgery.

2. Anesthesiologist/Nurse Anesthetist:

a. Perform examination on any patient scheduled for general anesthesia.

b. Make judgment concerning suitability of patient for general anesthesia in the ambulatory setting, contacting surgeon if this judgment is negative.

c. Arrange alternative measures when necessary.

d. Complete pre-anesthetic summary (SF 517), as required.

e. Provide indicated pre-anesthesia counseling.

C. DAY OF SURGERY

1. ASNU Staff (For Reception/Preparation):

a. In-process patient

(1) Review file for completeness:

(2) After making positive identification, affix patient identification bracelet.

(3) Notify PAD of admission.

(4) Escort patient to preparation/gowning area.

b. Assist patient in gowning as necessary.

c. Accomplish pre-operative preparation of patient as required.

d. Hold patient until the appointed time for transfer to the main OR suite. NOTE: Patient may have visitors while in the holding area.

e. Transfer patient at appointed time.

f. Direct patient's family/visitors to appropriate waiting area.

2. Operating Room Staff: No change to existing procedures.

3. Recovery Room Staff: No change to existing procedures. Ambulatory surgery patients are to be transferred to the ASNU (Ward 10E) for second stage recovery and discharge when post anesthesia recovery (PAR) criteria are attained.

#### 4. ASNU Staff (For Recovery/Discharge)

a. Place the patient in the second stage recovery area and reunite patient with family/friends.

b. Closely monitor patient's recovery process and note when the various discharge criteria have been accomplished by the patient. The following criteria are recommended and may be amended by proper medical authority:

(1) Vital signs stable

(2) No nausea or vomiting

(3) No undue pain

(4) Minimal or no drainage is seen on dressings

(5) Patient can ambulate

(6) Patient can tolerate fluids

(7) Responsible adult is available to transport and remain with patient overnight

c. Conduct post-operative training and provide patient with appropriate post-operative literature.

d. Advise patient to call the WBAMC Emergency Room during non-duty hours, or the ASNU during duty hours, should questions or problems arise.

e. When discharge order is written, assist patient in dressing as required.

f. Instruct family member to present any prescriptions to the main pharmacy prior to discharge.

g. Escort patient to appropriate hospital entrance. Patients may pay their bill at the Treasurer's Office at this time if they desire. NOTE: All patients other than infants/small children should be taken to the discharge point in a wheelchair.

h. Notify PAD of discharge of patient.

i. Make followup phone call the day following surgery.

#### 5. Physican:

a. Conduct post-operative physical examination of patient.

b. Write discharge note and provide patient with any required drug prescriptions.

c. Emphasize any post-operative precautions deemed necessary.

6. Ward 10E Secretary:

Transfer ambulatory surgery patient records to PAD in accordance with existing procedures for other inpatient records.

**APPENDIX F**

**Proposed Schedule X**

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**REQUIREMENT CONTROL  
SYMBOL CSGPA-1302**

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PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

SECTION D - SPECIFIC REMARKS

COMMANDER

1. Local appraisal must be used since no similar unit exists within the Army.
2. a. Ward 10 ASNU will be located on Ward 10 East, but will be providing a distinctly separate mission from this ward's existing mission which will continue. ASA Class I and II patients requiring certain minor/elective procedures would be treated on an outpatient basis. Following referral into the ambulatory system by the physician, Ambulatory Surgery Nursing Unit (ASNU) would assume the coordinating, processing, second stage post-operative recovery, and patient teaching missions. Existing equipment and facilities would be used. The unique feature of this system is that certain pre-operative and post-operative functions would be accomplished on an outpatient basis, thus freeing existing nursing staff to care for more complicated cases. As noted in Section B, approximately 1000 patients per year are projected for this mode of treatment. This represents a very conservative estimate, and would be expected to increase once the program becomes well established.
- b. The ASNU would be operation Monday thru Friday from 0700-1630, with surgical procedures being accomplished from approximately 0800-1200. This will allow sufficient time for post-anesthesia recovery and discharge the same day. Unexpected complications would result in the patient being transferred to the appropriate surgical ward.
- c. Although these patients are treated on an outpatient basis, a formal admission would be required. This is considered necessary for workload accounting purposes. Precedence for this admission policy is the ambulatory surgery program at Walter Reed Army Medical Center.
- d. While the patient will be in the hospital only a short time, it is a very intense time since those functions previously conducted over a course of two to three days will now be done in a matter of hours. The patient is required to take on additional responsibility for self-care and will require additional counseling and teaching. The civilian sector has learned that the presence of registered nurses is vital to the successful operation of an ambulatory surgery program. It is imperative that the WBAMC ASNU be directly supervised by a registered nurse. Additionally, a specific request for civilian nursing assistants is made in order to provide continuity to the program.
3. The proposed responsibilities for each of the requested positions are as follows:
  - a. HEAD NURSE - Responsible for the operation and administrative management of the ASNU. Coordinates the goals and objectives of the unit with the Ambulatory Surgery Steering Committee and the Department of Nursing. Insures the smooth and efficient flow of the patient through the ambulatory surgery system. Introduces and establishes new procedures, routines, and/or policies as indicated. Coordinates unit operations with referring clinics, Anesthesia Office, Operating Room, and other services as needed. Interprets, clarifies, and executes orders of medical officers. Evaluates nursing effectiveness and makes appropriate changes when required. Insures that an effective patient teaching program is conducted. Plans and conducts appropriate inservice training.
  - b. NURSING ASSISTANT - Performs a variety of complex nursing care tasks involving extensive standardized procedures requiring knowledge and consideration of specific patient conditions and treatments. Prepares the patient for surgery and provides routine pre- and post-operative patient instruction as directed by the Head Nurse. Performs assigned housecleaning tasks. Escorts patients to appropriate hospital exit when discharged.
  - c. MEDICAL CLERK - Performs receptionist, recordkeeping and clerical duties related to patient treatment in the ASNU. Coordinates scheduling of the patient into the ASNU with referring clinics. Assembles and maintains patient records in the prescribed format. Coordinates admissions and discharges with Patient Administration Division. Checks contents of medical records to insure completeness prior to anesthesia interview, surgery, and discharge of patient. Prepares discharge paperwork for patients including followup appointments, preparing clearance sheets, prescriptions, and gives necessary directions to the patient. Type necessary reports, correspondence, or time schedules as directed by the Head Nurse. Performs other clerical duties as directed.



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